

**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE
ON KNOWLEDGE REGARDING POST DIALYSIS
HOME CARE AMONG CARE GIVERS OF
CHRONIC RENAL FAILURE PATIENTS
UNDERGOING HAEMODIALYSIS
IN KARTHIK HOSPITAL
AT SIVAGANGAI.**

REG NO : 301611851

**A DISERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R.
MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT
OF THE REQUIRMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING**

OCTOBER 2018

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Signature of the

Internal Examiner

Signature of the

External Examiner

CERTIFICATE

This is to certified that the dissertation entitled “**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING POST DIALYSIS HOME CARE AMONG CARE GIVERS OF CHRONIC RENAL FAILURE PATIENTS UNDERGOING HAEMODIALYSIS IN KARTHIK HOSPITAL AT SIVAGANGAI**” is submitted to the faculty of nursing, **The Tamilnadu Dr.M.G.R Medical university, Chennai** by **Mrs.S.Bhuvaneswari** in partial fulfilment of the requirement for the degree of master of science in Nursing. It is the bonafide work done by her and the conclusions are her own. It is further certified that this dissertation or any part there of has not formed the basis for award of any degree, diploma or any title

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ABSTRACT

The study on **“EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING POST DIALYSIS HOME CARE AMONG CARE GIVERS OF CHRONIC RENAL FAILURE PATIENTS UNDERGOING HAEMODIALYSIS IN KARTHIK HOSPITAL AT SIVAGANGAI ”** was undertaken by **Reg no : 301611851** during the year 2017-2018 in partial fulfilment of the requirement for the degree of Master of Science in nursing at RASS Academy college of Nursing, poovanthi ,which is affiliated to the Tamilnadu Dr.M.G.R Medical University, Chennai.

Objectives : To assess the pre test level of knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis. To evaluate the effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis .To find out the association between the pre test level of knowledge regarding post dialysis home care among caregivers of chronic renal failure patients undergoing haemodialysis with their selected demographic variables. **Conceptual framework :** The study framework was based on shuffle Beam ‘s CIPP Programme evaluation model(1960), to find the effectiveness of self instructional module in improving knowledge regarding post dialysis home care. **Approach:** Evaluatory approach was adopted for this study. **Design:** Pre experimental one group pre test post test design was adopted for this study. **Setting:** The study was conducted in karthik hospital, Arranmannai vassal at sivagangai. **Sample size:** The sample size was 50 care givers. **Sampling technique :** The Non probability purposive sampling technique was used .**Methods of data collection procedure :**Data were collected from the care givers to assess the level of knowledge by using semi structured questionnaire before self instructional module. Post test was conducted 1 week after administration of self instructional module, the level of knowledge was assessed .The collected data were tabulated and analyzed by descriptive and inferential statistics. **Results :** The results showed that, there was a significant difference in pre test and post test level of knowledge on post dialysis home care of haemodialysis patients, tabulated t- value (25.36)was greater than table value at 0.05,level of significance . Its shows the self instructional module was effective in improving the knowledge. **Conclusion :** This study concludes that self instructional module was effective in improving the knowledge of care givers regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis.

CHAPTER –I

INTRODUCTION

**“Health is like a money, we never have a true idea of its value
until we lose it”**

-Josh billings

The kidneys are two bean shaped organ, that are normally located in left and right side of the body at back of the abdomen cavity. The left kidney typically somewhat more superior in position than the right. The upper poles are normally oriented more medially and posterior than the lower poles.

The kidney serve important functions including, filtration and excretion of metabolic waste product (urea, ammonium), regulation of necessary electrolytes , fluid and acid base balance, stimulation of red blood productions. They also serve to regulate blood pressure, reabsorb glucose and aminoacids and have hormonal functions via, erythropoietin, calcitriol and vitamin -D activation. (**Charbhel e.chaouny 2017**)

Renal failure also known as renal insufficiency is a condition where kidneys lose the ability to remove waste and balance fluids from blood. Diabetes mellitus and higher blood pressure are the most common causes of renal failure. Two distinct types of renal failures acute renal failure and chronic renal failure. (**Journal of renal medicine**)

Acute renal failure (ARF) is a rapidly progressive loss of renal function, generally characterized by oliguria, fluid and electrolyte imbalance . The causes of acute renal failure include low blood pressure, blockage of urinary tract, certain medications muscle breakdown and haemolytic uremic syndrome . The symptoms of that includes leg swelling, feeling tired, confusions, vomiting and loss of appetite. Complication of acute renal failure may include uremia, high blood potassium or volume over load. Acute renal failure is often reversible while than chronic renal failure. (**American Journal of Kidney Disease**)

Chronic renal failure is a complex disease, it's a gradually loss of function and its functions is not to return back. Chronic renal failure person should be assess and receive optimal treatment to reduce their mobility and motility. **(Robert Thomas 2008)**

Diabetes mellitus and hypertension is the top most risky people for developing end stage renal disease and also associated risk factors of elderly population, smokers, and obesity. These peoples are highly risk of death from end stage renal disease remains 10 -20 times higher than in the general population. The quality of life is usually low and morbidity and mortality is high. **(Parmer ms 2002)**

The most common causes of chronic renal failure includes diabetes mellitus, high blood pressure, nephritic syndrome ,polycystic kidney disease and other common causes of chronic renal failure include recurring pyelonephritis, auto immune disorders, urinary tract blockage and reflux, excessive use of medications and hardening of the arteries . Which can damage blood vessels in the kidneys. **(Lewis 2008)**

The clinical impact of chronic renal failure is hypertension, hypokalemia, decrease urination, anemia, nausea and vomiting, muscle cramps, insomnia, loss of appetite, ankle edema and constipation .These clinical manifestation of disease may not occur in every patients and may develop later during the progression of disease. Therefore monitoring and identifying the factors and considered an important part of the medical management of chronic renal failure. **(Abbas ebadi 2017)**

There is no current cure for chronic renal failure. However some therapies can help to control the signs and symptoms, reduce the risk of complications and slow the progression of the disease such as fluid restrictions, medications, diet, dialysis (haemodialysis and peritoneal dialysis) and kidney transplant.

Dialysis is a treatment that filters and purifies the blood using amachine .This help keep body in balance when the kidney cannot do their jobs. Dialysis has been used since the 1940s to treat people with kidney problems. Itsfilter the toxins, salts and purify the blood with using a machine. It helps to keepthe balance between body fluids and electrolytes. **(Jeanne 2015)**

In haemodialysis (HD) the blood is pumped out of the patients body and goes through a dialyzer. It called as an artificial kidney. The patients undergoes haemodialysis about three times per week. Each sessions last for atleast three hours. It

has a three type of vascular access site such as arteriovenous fistula, arteriovenous graft and central venous catheter.

In peritoneal dialysis (PD) Implant the catheter in to the abdomen. It helps to filter the blood through the peritoneum, a membrane in abdomen. It's done in four or five times per day according to the patients. This kind of dialysis rare under the patients. It has two types such as continuous ambulatory peritoneal dialysis (CAPD), Automated peritoneal dialysis (APD) (**Hamid 2016**)

Chronic renal failure is a complex disease impacting more than twenty million individuals in the united states. Progression of chronic renal failure is associated with a number of serious complications, including increased incidence of cardiovascular disease, hyperlipidemia, anemia, metabolic bone disease, renal bone osteodystrophy, hyperparathyroidism, hyperphosphatemia. (**christ.JD 2017**)

The haemodialysis patients may such a experience of health issues due to dialysis in after them post dialysis period life like that, low blood pressure, nausea and vomiting , itchy skins, muscle cramping in legs, fluid overload. The patients coping with the above top five effects of haemodialysis through their life. (**National Kidney Foundation**). The risk associated with haemodialysis includes low blood pressure, anemia, muscle cramping, difficulty sleeping, itching, pericarditis, sepsis, irregular heartbeat. (**Carissa Stephen 2018**)

Home care is otherwise called domiciliary care or social care .Home care is a supportive care provided in the home. Most of the family members have inadequate knowledge about the post dialysis home care & meet the some of complications due to haemodialysis in the home. They can only social network who helps them with activities of daily living.

Home care management is a form of health care service provided where a patients lives. Patients can receive home care service whether they live in their own homes with or without family members or in an assisted living facility. The purpose of home care is to promote, maintain or restore a patients health and reduce the effects of disease or disability. (**William 2013**)

Care givers are vital and rational source of health care and families are often the first source of home health care .Family center care is a recognised approach in providing holistics health care which necessitates the co-operations between the patients, family and health care professionals to provide quality of health care. **(Bradon 2013)**

NEED FOR THE STUDY

**‘Of all of the forms of inequality, in justice in health
is the most shocking and in humane’**

- **DR.MARTIN LUTHER KING**

Chronic renal failure is a public health problems in world wide. Its progressive loss of renal function that last for more than 3months. Its classified according to the degree of kidney damage measured by the level of proteinuria and the decline in glomerular filtration retee. The most severe form is end stage renal failure.

Mukesh et al., 2015, One of the global public health problems affecting 5-10% of world population in general is Chronic Kidney Disease (CKD). Chronic Kidney Diseases are evolving as a most important health threat. The people suffering from kidney diseases finally require an expensive and life-long Renal Replacement Therapy. Patients who suffer with Chronic Kidney Disease have to be taken care at home for a longer time before Kidney Transplantation and they depend on intermittent dialysis and drugs to maintain optimum health. Chronic renal failure is a global health burden with a high economic cost to health systems and is independent risk factors for cardiovascular disease. All stage of chronic renal failure are associated with increase increase of cardiovascular morbidity, premature mortality and decrease quality of life.

F.Stats, In 2017, 30 million peoples are estimated to have prevalence of chronic renal failure in united status. Adults with diabetes mellitus, high blood pressure or both have a higher risk of developing chronic renal failure than those without these disease other causes of are obesity and family history of chronic renal failure. Males (16%)are more affected than the females (13%). In 2016 1. 1 million peoples are affected by chronic renal failure in mexicocity. The burden of chronic renal failure impacts low income, obesity, inadequate physical activity. In over all chronic renal failure mortality has increased of 13.7 %. **(Brendon)**

Singh (2015) Chronic renal failure is a global threat to health in general and for developing countries in particular, because therapy is expensive and life long. In

india 4.2 % populations suffering from chronic renal failure.. over 1 million people world wide are alive on dialysis with a functioning graft. Incidence of chronic renal failure has doubled the last 15 years.

K.Sampath kumar (2018) The prevalence of chronic kidney disease in tamil nadu 10 % to 15 % of population and around 65,000 requires advanced treatment in tamil nadu like dialysis and renal transplant. In this advanced treatment 10 % dialysis and 1 % of transplant need to the patients, Tamil nadu has the highest death rate due to lifestyle disease such as diabetes and chronic renal failure . In tamil nadu, the death rate for chronic renal failure is 35/1000. **Pushpa narayan (2017)**

Grapsa Eirini(2016) Caregivers play a significant role in the support of patients undergoing haemodialysis , since a large number of them have a poor physical function and cognitive impairment and are unable to look after themselves Caregivers are involved in patients' care and assistance during haemodialysis inorder to help them adapt and effectively manage their treatment They help patients with their daily activities, household tasks, and personal care, such as bathing and dressing, while they undertake responsibility for technical health procedures in dialysis . They also manage their money or communicate with professional caregivers when appropriate.

Tongetal (2018) Most of the families of the hemodialysis patients have reported the lack of sufficient information about the disease, control of symptoms and patients care .they mostly wanted to know about the food and drug management of their patients .The hemodialysis patients caregivers are facing two problems of caring, treatment and conformity with their home caring responsibilities. Also a review study indicates the necessity of educations intervention to support these care givers.

Choudhary rashmi et.al., (2015) performed an exploratory study to assess the knowledge regarding post dialysis home care among care givers of haemodialysis patients in mohali.. There are 100 care givers was selected by descriptive and inferential statistics. A self administrated questionnaires was used to assess the knowledge regarding post dialysis home care among care givers of hemodialysis patients. They concluded that the study was 19 % have good knowledge, 50 % have moderate knowledge, 29 % had poor knowledge and no body have excellent knowledge about post dialysis home care of haemodialysis patients.

And also, from the above mentioned studies, investigator found that there is a need to strengthen the knowledge of care givers regarding effectiveness of self-instructional module on knowledge regarding post dialysis home care among caregivers of chronic renal failure undergoing haemodialysis. The present study is designed to assess the knowledge level of care givers and administer a self instructional module which will help them to improve their knowledge.

STATEMENT OF THE PROBLEM

“Effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis in karthik hospital at sivagangai”

OBJECTIVES

- To assess the pre test level of knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.
- To evaluate the effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis
- To find out the association between the pre test level of knowledge regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis among care givers with their selected demographic variables.

HYPOTHESIS

- **H1 :** There will be a significant difference between pretest and post test level of knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.
- **H2 :** There will be a significant association between the pre-test level of knowledge with their selected demographic variables such as, age, gender,

marital status, education, occupation, monthly income, previous knowledge of chronic renal failure, relationship of the patient and previous family history of chronic renal failure.

OPERATIONAL DEFINITION

Effectiveness

In this study ,its refers to the extent to which the self instructional module has brought significant gain knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis between pre test and post test knowledge score.

Self instructional module

In this study, its refers to self learning information prepared for caregivers to improve the knowledge on chronic renal failure, cause, risk factors, signs and symptoms, and post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis .

Knowledge

In this study, its refers to the facts information acquired through education by care givers regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis.

Post dialysis home care

Post dialysis home care includes various aspect of health issues due to haemodialysis, causes, signs and symptoms, management and care of vascular access site, dietary recommendations, renal transplantation.

Care givers

In this study care givers refers to who are responsible for haemodialysis patients at home like family members or friends.

Chronic renal failure

In this study, it's a complex disease and irreversible destruction of nephrones or gradually loss of kidney functions atleast 3-6 month duration.

Haemodialysis

In this study, haemodialysis is treatment for renal failure that is filter the toxins, salts and purify the blood with using a machine

ASSUMPTION

The study assumes that,

- Care givers have inadequate knowledge about post dialysis home care of chronic renal failure patients undergoing haemodialysis.
- Education about post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.
- A self instructional module is one of the best systematical developed material on post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.

LIMITATIONS

The study is limitation to,

- The study focused only on care givers.
- The sample size is limited to 50 members
- Able to read and speak tamil.

PROJECTED OUTCOMES

- The findings of the study will help to improve the level of knowledge to care givers regarding chronic renal failure patients undergoing haemodialysis.
- It helps the care givers understand the post dialysis home care and also motivate the care givers to follow the practice.
- This helps to investigators to prepare the teaching module to teach the chronic renal failure and eliminate the misconception by providing factual information regarding hemodialysis.

CONCEPTUAL FRAME WORK

The present study aim to assess the effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.

The conceptual frame work of this study based on shuffle beams CIPP programme evaluation model, 1960 CIPP is an acronym the stand for context, input process & product.

CONTEXT

Its provides information for development of and evaluation of mission, vision, value, goals & objectives.

In the study context consists of socio demographic variables of the care givers such as age, gender, types of family, married status, education, occupation, monthly income, relationship of the patient, family history of chronic renal failure and previous information regarding chronic renal failure.

INPUT

Its helps to assess different teaching & learning approaches. It includes designing of intervention programme.

In this study is self instructional module prepared basis of learning needs.

PROCESS

Process evaluation assesses the implementation of plans. In this study process evaluation refers to evaluating the pretest & post test level of knowledge

PRODUCT

In this evaluation of the outcome of the programme. In the study product is the improved response of the care givers followed by the implementation of self instructional module programme.

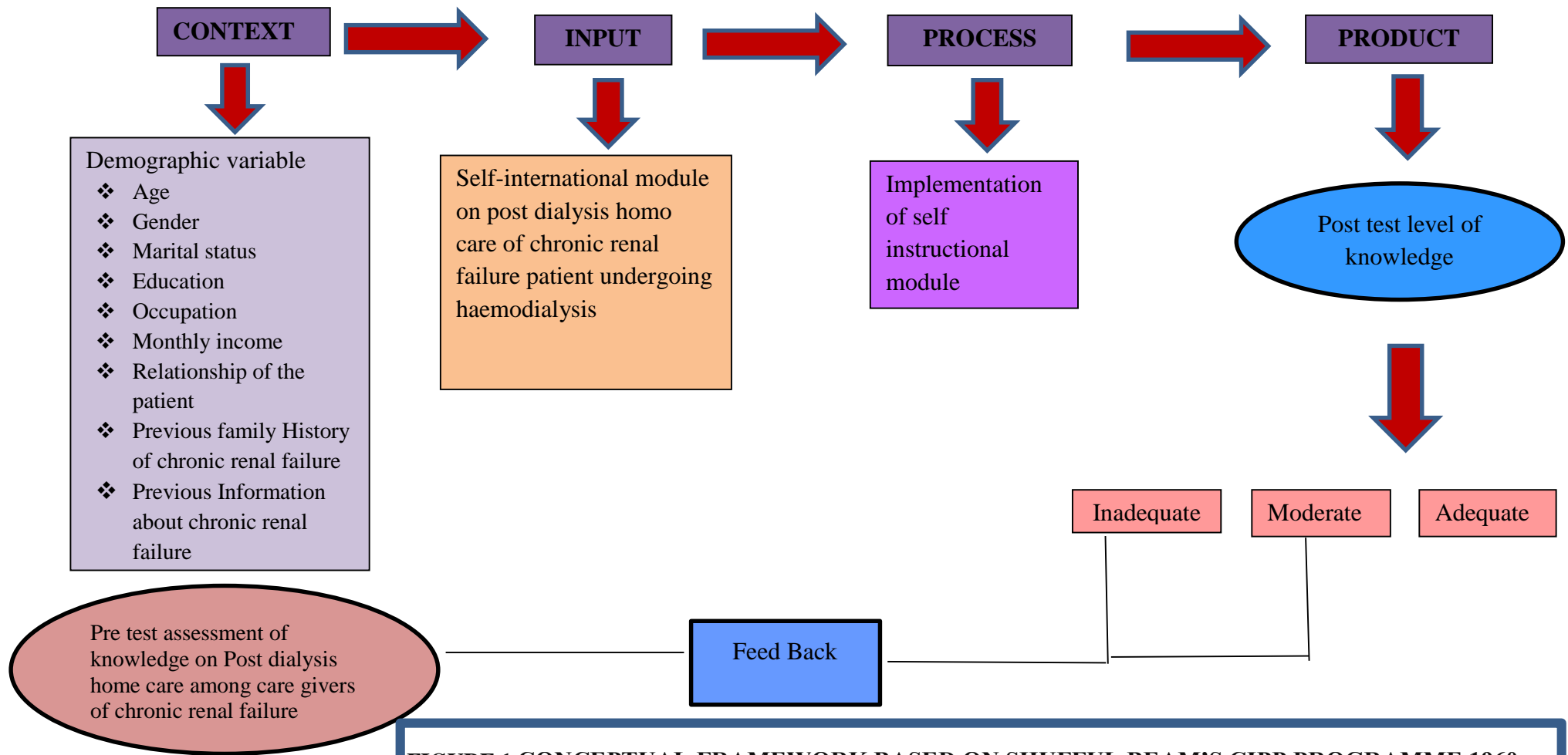


FIGURE 1 CONCEPTUAL FRAMEWORK BASED ON SHUFFUL BEAM'S CIPP PROGRAMME 1960

CHAPTER II

REVIEW OF LITERATURE

According to, **BT. Bsavanthappa (1998)** review of literature is a key step in the research process . Its refers to an extensive and systematic examination of publications relavant to research project. The extensive review was made to strengthen the present study in order to lay down the foundation which helps us to reveal the prevailing situation of the similar studies in different areas. The related literature of this study was presented in the following sections.

- ❖ **Literature related to chronic renal failure**
- ❖ **Literature related to knowledge regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis**
- ❖ **Literature related to other teaching methods regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis**
- ❖ **Literature related to self instructional module for improving the knowledge regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis**

I. Literature related to chronic renal failure

Davide bolignano et.al., (2017) had done a survey to assess the prevalence and burden of chronic kidney disease among 152 individuals of general population and high risk groups in Africa. The samples were selected through survey. The specialised design questionnaire was used. The results of the studies was the prevalence of chronic kidney disease ranged from 2% to 41%. The prevalence of chronic kidney disease in the high risk groups ranged from 1 % to 46% in patients with HIV, 11% to 90% in patients with diabetes and 13% to 15 % in patients with hypertension. They concluded that the study was, in Africa chronic kidney disease was a public health problems, mainly attributed to high risk conditions as hypertension and diabetes.

Chinyere manwanyi et.al., (2015) performed a cross sectional cohort study to assess the prevalence of risk factors for chronic kidney disease among 259 adults in a university community in southern Nigeria. The data were collected through interviewer

administered questionnaires. The parameters assessed were demographics, body mass index, blood pressure, proteinuria, glycosuria, serum creatinine and fasting plasma glucose. The result of the study showed that a total of 259 volunteers, mean age of participants were 28.3±9.7 years (16-66 years). Out of 259, males comprised 135 (52.1%) while 124 (49.9%) were females. The frequency of risk factors of chronic kidney disease observed were obesity in 31 (12.2%) subjects, proteinuria and glycosuria in 32 (12.4% and 7(2.7%) subjects respectively. Hypertension and hyperglycemia were seen in 54(20.8%) and 11(4.3%) of subjects respectively. They concluded that the prevalence of chronic kidney disease risk factors in this population was high and there was need for continuous education, regular screening for early detection and early intervention by risk factors modification to prevent or reduce the growing burden of chronic kidney disease in Nigeria.

Hussain gadelkarim ahmed et.al., (2014) had conducted a cross sectional survey to assess the risk factors of chronic kidney disease among 30 primary health care centers (PHCs) in Hail region Saudi Arabians. The data were collected from 5000 Saudi peoples through interview. The result found that overall prevalence of risk factors for chronic kidney disease in Hail was 75%. The prevalence rates of cardio risk factors such as vascular disease was 5.3 %, continuous use of non – steroidal anti inflammatory drugs 10.7% , herbal preparation 13.5% and cigarette smoking were 31% respectively. The correlation of high creatinine levels (>1.4mg/dl) have shown statistically significant difference with hypertension ($p=0.000$), diabetes mellitus ($p=0.000$), obesity ($p=0.013$), cardiovascular disease ($p<0.05$) and smoking ($p=0.02$). They concluded that there are many risk factors significantly contributing to development of chronic kidney disease in Saudi Arabia. Application of future prevention and control measures are highly recommended to reduce the burden of chronic kidney disease.

Vidhyan acharya et.al., (2013) had conducted a prospective cohort study to identify the prevalence of chronic renal failure among 558 subjects above 18 years of age including both male and female at Brigham and women's hospital in Boston. The data was collected through a specifically designed questionnaire. Their results show that overall prevalence of chronic kidney disease was 17.2% with 6% have Chronic kidney disease or worse. The total mean ± SD age of all participant was 45.22 ± 15.2 years (18 – 98 years) and 55.1 % were males and 44.9% females respectively.

Hypertension was observed in 43.1% of our populations while 18.8 % of them were diabetics. They suggested that early intervention may retard the progression of kidney disease.

Angela maria et.al., (2015), was performed the retrospective study to analyse the prevalence and factors associated with chronic kidney disease among 1422 hospitalized patients in a university hospital in the city of Brazil. The subjects were selected through Randomization and quantitative design was adopted. The data were collected from the medical records of each patient and by means of an instrument designed for this purpose. The prevalence of chronic kidney disease was 12.7% with the more co-morbidities such as hypertension 75.3%, diabetes 49.5%, dyslipidemia 23.8%. They concluded that the prevalence of chronic kidney disease among medical inpatients unit was high and the patients were more complex as they were older and had a great number of co-morbidities, reflecting a greater risk of death during hospitalization.

Sabitra poudel et.al., (2017), has done a cross sectional study to identify the burden and depression of care givers of chronic kidney disease undergoing haemodialysis patients in dialysis ward of human organ transplant center in Bhaktapur. There are 164 caregivers of haemodialysis patients selected for this study. Descriptive design was adopted in this study. Care givers burden was measured by Zarit Burden Inventory (ZBI) and depression was measured by using Beck Depression Inventory (BDI). The 4% of caregivers had little or no burden, 30 % with mild to moderate burden, 49 % with moderate to severe burden and 17 % with severe burden. They concluded that caregivers of haemodialysis patients are facing significant burden and more than one third are moderate to severely depressed. Interventions to provide appropriate social support services and improve psychological conditions of caregivers is urgent and paramount importance.

II. Literature related to knowledge regarding post dialysis home care of chronic renal failure undergoing hemodialysis

Shashi kumar jawadagi et.al., (2014) has done a descriptive study to assess the knowledge and practice of dietary regulations in chronic renal failure patients undergoing hemodialysis among 51 patients at KLES hospital and MRC Belgaum, Bijapur. A structured interview questionnaire was used to assess the knowledge and practice of dietary regulations in chronic renal failure patients undergoing

hemodialysis. The finding revealed that highest level of knowledge was scored by 8 (16.69) subject only and 29 (56.89%) subject scored between the range of 10 -18 practices score. The p value is $p>0.05$. This study concluded that nurses can broaden their horizon of the patients by educating about the importance of dietary regulation in chronic renal failure undergoing hemodialysis.

K.Srinivaasan (2014) has performed research to assess the knowledge on dietary management among 30 chronic renal failure patients undergoing haemodialysis in Melmaruvathur Adhiparasakthi institute of medical science hospital, kanchipuram. The descriptive research design and non probability convenient sampling technique was adopted in this study. The structured questionnaire was used. The finding revealed that 20(66.66%) had moderately adequate knowledge, 6(20%) had highly adequate knowledge and 4 (13.33%) had inadequate knowledge about dietary management of chronic renal failure.

Sanjita acharya pandey et.al., 2014 has conducted a study to assess the knowledge regarding care of av fistula among 50 haedialysis patients at human organ transplants center ,Bhakupur in Nepal. The information was collected by face to face interview technique using semi structured questionnaire. The data was analyzed by using descriptive statistical technique used. The finding were majority of the patients 74% had adequate knowledge where as 24 % had moderate knowledge regarding care of AV fistula . This study concluded that there was a need of educational programme for patients attending hemodialysis unit to improve their level of knowledge and prevent complication.

III. Literature related to other teaching methods regarding post dialysis home care among caregivers of chronic renal failure under going haemodialysis

Ramya (2017) had done a study to assess the effectiveness of structured teaching programme on knowledge regarding post dialysis home care among 60care givers of chronic renal failure patients undergoing haemodialysis in P.G hospital, Coimbatore. Quasi experimental research design and purposive sampling technique was adopted for the study. The data was collected by the s structural interview questionnaire. They results shows that of the study showed that 78.3% of the samples had good knowledge ,24.5% of them had average knowledge and 5% them had a poor knowledge. The educative programme was effective in impacting knowledge.

Salwa Mohamed (2014) had done a study to find out the effectiveness of an educational intervention on fatigue in 18 haemodialysis patients in fayoun hospital. A quasi experimental research design was adopted for the study. The samples were selected through andomization. The peoples were divided into two groups, the experimental and control group. Fatigue was assessed by piper fatigue scale. There was significant statistical difference between age, gender, duration of disease, frequency of dialysis and level of fatigue ($p=0.05$). They concluded that early intervention protocol leads to improve the knowledge related to haemodialysis and reduce the fatigue in haemodialysis patients.

Nema ram gurjar et.al., (2014),has performed a study to evaluate the effectiveness of structured teaching programme and practice of home based self care among 30 patients undergoing haemodialysis in dialysis unit of NIMS hospital ,Jaipur. The data was collected with the help of structured knowledge questionnaire and self reported practice was used. The result revealed that the mean post test knowledge score 18.8 was higher than mean post test knowledge score 14.23 and 't' value was 5.001($p=0.05$). The mean post test practice score 29.53 was higher than the pre test practice score 29.53 and 't' value was 7.73($p=0.05$).They concluded that the patients teaching followed by distribution of booklet on home based self care among patients undergoing hemodialysis was beneficial.

Golnar ghane et.al., (2016) had done a study to find out the effect of educational programs on the burden of family caregivers of haemoglobin patients. The randomized controlled clinical trial was conducted on 76 care givers of haemodialysis patients referred to Shahid Hasheminejad haemodialysis center of Tehran , iran. The data was collected using the care givers burden inventory (CBI) at the beginning and six weeks after the intervention. The Result showed that t –test revealed a significant difference between the mean scores of care givers burden in the intervention ($58.7+6.6$) and control groups ($87.8+11.7$) ($p=0.05$). More over , the caregivers burden reduced in the intervention group and increased in the control group. So the educational programme was effective in imparting knowledge.

Amany youssef (2016) has done a study to assess the impact of educational intervention on haemodialysis patients adherence to fluid and sodium restrictions. The study was conducted among 45 patients for 6 months in haemodialysis unit institute of

medical researches Alexandria university, Egypt. Quasi experimental design was adopted for the study. The finding revealed that the patients knowledge percent score increased from 24+8.86 to 96.36 .+6.04 ($p<50\%$) were considered unsatisfactory level knowledge score from (50>75%) were considered satisfactory level of knowledge. They concluded that the educational intervention was effective to improve the knowledge of fluid and sodium restriction.

Fazlollah ahmadi et.al., (2018) had performed a qualitative study on the experience of Iranian family care givers regarding patients undergoing haemodialysis . A content approaches was used for data collection and analysis. 16 family care givers were selected through purposive sampling from four medical centers affiliated with Ahvaz Jundishapur university of medical science. The data were collected by semi structured interviews with four domains like care challenges, psychological vulnerabilities, the chronic nature of care and care in the shade and main theme progressive exhaustion. The results showed that the family caregivers have significant role in the process of patient care, and this role leads them to progressive exhaustion .Therefore the overall health of the cre givers should be taken into account and more attention should be paid to the quality of life, social welfare, satisfaction level.

IV. Literature related to self instructional module for improving the knowledge regarding post dialysis home care of chronic renal failure undergoing haemodialysis

Deepak kumar shandily et.al., (2016) had conducted a quasi experimental study to evaluate the self instructional module on knowledge regarding post dialysis home care among 60 patients with chronic renal failure undergoing haemodialysis at ivy hospital Mohali , Punjab. Pre experimental design was adopted and the self structured quesstionnaires was used for the study. The result shows that the study is level of knowledge the patients scored 63.3 % excellent knowledge about the study. Stated hypothesis is accepted ($p=,0.05$). Its shows that SIM was effective.

Jeyalakshmi.et.al., (2016) has conducted a study to find out “the effectiveness of self instructional module on knowledge and practices among 60 care givers on home care management of patients on haemodialysis. Pre experimental approach was used for the study. The structured questionnaire on knowledge self reported practice on home care management of haemodialysis patient was used. They concluded that 50 % of the

samples had good knowledge, 45 % had average knowledge and 5% had poor knowledge following the administration of the self instructional module. The post test revealed that the knowledge and practice improved, gained good knowledge and practice (78.3%)in the post test. The self instructional module was effective to the care givers of haemodialysis patients.

Nilesh mishra et.al., (2017) had done a study of to evaluate the effectiveness of self instructional module on knowledge regarding home care management among 30 patients undergoing haemodialysis in Bombay hospital Indore. Pre experimental design was used. Non purposive sampling technique was used. The self administered tool and multiple choice questionnaire was used for data collection. The result revealed that the pre test score was 14.3 with the SD 3.97 and post test was 20.7 with the SD 3.62 . The computed 't' value 10.67 was higher than p value of 0.05 level of significant. The concluded that self instructional module could be effective strategy to improve the knowledge about home care management of haemodialysis among the patients undergoing haemodialysis.

Minu et.al., (2018) had done a study to evaluate the effect of self instructional module in enhancing knowledge regarding home care management of av fistula among 30 haemodialysis patients in Rama hospital, Kanpur. The quantitative research approach and one group pre test design research design was used in this study. Data was collected by structured questionnaire. The result of the study is the level of knowledge on post dialysis home care of av fistula 60 % were have moderate knowledge , 30 % were adequate knowledge and 10 % were inadequate knowledge. Hence they concluded that the booklet was efficient in improving the knowledge among the patients.

CHAPTER –III

RESEARCH METHODOLOGY

This chapter includes research design, approach, setting of the study, population, sample, sampling technique, development and description of the tool, content, validity, reliability, pilot study, procedure for data collection and data analysis.

Research approach

Evaluatory approach was used in this study

Research design

The investigator has adopted pre-experimental one group pre-test post – test design for this study. The diagrammatic representation design is below.

GROUP	PRETEST	EXPERIMENT	POST TEST
E	O1	X	O2

E - Pre Experimental group

O1 - pre test level of knowledge.

X - Self instructional module

O2 -Post test level of knowledge.

Variables under the study

Independent variables : In this study self instructional module on knowledge regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis.

Dependent variables : In this study knowledge of care givers regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis .

Setting of the study

The study was conducted in karthik hospital, Arranmanai vassal, at sivagangai which is 25 km away from our college of nursing. This hospital is a 50 bedded hospital

with 7 beds in haemodialysis unit ; approximately 100 patients are presented in out patients department every day. Daily around 14 patients were dialysed. The hospital is also having the facilities of laboratory and pharmacy.

Target populations

The Care givers of chronic renal failure patient undergoing haemodialysis.

Accessible population

The Care givers of chronic renal failure patient undergoing haemodialysis in sivagangai district.

Sample

The Care givers who fulfil the inclusion criteria was considered as a sample.

Sample size

The total Sample size consists of 50 care givers of chronic renal failure patients undergoing haemodialysis in Karthik hospital, Arranmanai vassal, at sivagangai.

Sampling technique

Non-probability - purposive sampling technique was used for this study.

Criteria for sample selection

The samples are selected based on the following inclusion and exclusion criteria.

Inclusion criteria

- ❖ Who are care taker of chronic renal failure patients undergoing haemodialysis.
- ❖ Who are willing to participate
- ❖ Who are able to understand Tamil.

Exclusion criteria

- ❖ Care givers who are in medical field.
- ❖ Who are not available at the time of data collection

Research tool and technique

The instruments used in this study consisted of three sections.

Section A

Section A1 : It comprised of demographic variables of **care givers** such as age, gender ,marital status ,education ,occupation ,monthly income, relationship of patient,any family history of CRF and Previous information regarding CRF.

Section A2 : It comprised of demographic variables of **patients** such as ag , gender, marital status, duration of illness, duration of undergoing haemodialysis, type of vascular access site and frequency of haemodialysis per week.

Section B

It consists of semi structured questionnaire to assess the care givers knowledge regarding post dialysis home care of chronic renal failure patients undergoing haemodialysis. It consists of 30 multiple choice questions.

Part –A : Its consists of Anatomy and Physiology of kidneys.

Part- B : Its consists of general information about chronic renal failure.

Part-C: Its consists of information about post dialysis home care of chronic renal failure patients undergoing haemodialysis.

Scoring procedure

There were four choices, out of which one was correct answer and the remaining three were wrong answer. A score of ‘one’ was allotted to each correct response. ‘zero’ was rewarded for the wrong response . Thus there were 30 maximum obtainable scores. The level of knowledge was graded based on percentage of score obtained.

Level of knowledge

- Adequate knowledge = above 75%
- Moderate knowledge = 50 to 75 %
- Inadequate knowledge = below 50 %

Section C

It comprised self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis .The content on post dialysis home care of chronic renal failure patients undergoing haemodialysis was prepared through literature review and in consultation with experts. The content of the self instructional module was organized well by the following headings

- ❖ Kidneys anatomy and their functions
- ❖ Renal failure
- ❖ Types of renal failure
- ❖ Definition of acute renal failure
- ❖ Causes and Signs and symptoms of acute renal failure
- ❖ Definition of chronic renal failure
- ❖ Incidence of chronic renal failure
- ❖ Causes of chronic renal failure
- ❖ Signs and symptoms of chronic renal failure
- ❖ Post dialysis Home care of chronic renal failure undergoing haemodialysis
 - Health issues due to haemodialysis and their causes, signs & symptoms ,and their management
 - Care of vascular access site
 - Dietary recommendation for haemodialysis patients

Content validity

Data collection tool was evaluated by experts from the field of Medical surgical nursing and medicine for content validity. Suggestions were considered and appropriate changes were done and to made the tool to be valid.

Reliability

The data were collected from 5 care givers to find out the reliability. The test – re-test method was used to establish the reliability of the tool. The reliability coefficient of the whole test then estimated using the collected data and the value obtained was ($r = 1.0$) which indicates that tool was reliable.

Pilot study

Pilot study was conducted in Bright kidney hospital, Dr.Thangaraja salai, at Madurai for the period of one week with 5 care givers in order to test the feasibility, relevance and practicability of the tool. Result shows that the tool was feasibility to carry out the main study.

Data collection procedure

The investigator met the head of the institution in order to obtain permission and co –operation to conduct the study successfully. The formal prior permission was obtained from the director of karthik hospital, Aranmanai vassal at sivagangai. The investigator introduced herself to the care givers and established rapport with them. The study was conducted for period of six weeks. The data were collected from monday to Saturday, starting from 7 am to 3pm and spent around 20 mints for a sample .The investigator selected the samples who fulfilled the inclusion criteria. The informed consent was obtained. Appropriate orientation had given to the subjects about the aim of the study, nature of questionnaire and adequate care was taken for protecting the subjects from potential risk including maintain confidentiality, security, and identity. The demographic variables collected from the subjects. The pre test was done to assess the care givers knowledge through semi structured questionnaire. The self instructional module was administered. The post test of study was carried out one week later, using same tool as the pre test questionnaire. Collected data was then tabulated and analyzed.

Plan for data analysis

Data analysis was done according to the objectives of the study. both descriptive and inferential statistics were used.

1. Analysis of the demographical data was done by frequency, mean, percentage.

2. Paired 't' test was used to determine the difference between the pre test and post test score in terms of effectiveness of self instructional module.
3. Chi square test was used to determine the association between the selected demographic variables and pre test level of knowledge.

Production of human rights

Research proposal was approved by the dissertation committee of RASS Academy College of Nursing, poovanthi. Prior to the study oral consent was obtained from care givers of chronic renal failure patients undergoing haemodialysis before starting the data collection. Assurance was given to the samples that confidentiality would be maintained.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of data collected from the care givers who have received the self instructional module. The collected data were tabulated, analyzed and presented. Its consists of following sections:

- ❖ **Section I :** Description of the care givers according to their selected demographic variables.
- ❖ **Section II:** Description of the chronic renal failure patients undergoing hemodialysis according to their demographic variables.
- ❖ **Section III :** Description of the care givers according to their pretest and post test level of knowledge regarding post dialysis home care.
- ❖ **Section IV :** Comparison of pretest and post test level of knowledge on post dialysis home care.
- ❖ **Section V:** Association between the pretest level of knowledge of care givers and their selected demographic variables.

SECTION I

Description of care givers according to their selected demographic variables.

Table 2: Distribution of care givers according to their selected demographic variables.

(N=50)

S.no	Demographic variables	Frequency(f)	Percentage (f%)
1	Age in years		
	a)21 – 30	9	18
	b)31 - 40	21	42
	c)Above -40	20	40
2	Gender		
	a)Male	30	60
	b)Female	20	40
3	Marital status		
	a)Married	38	76
	b)Unmarried	12	24
	c)divorced	-	-
4	Education		
	a)Illiterate	9	18
	b)Primary education	16	32
	c)secondary education	17	34
	d) Degree	8	16
5	Occupation		
	a)Home maker	7	14
	b)private company	30	60
	c)government job	13	26
6	Monthly income		
	a) Rs.3000-8000	24	48
	b) Rs.8001-14,000	18	36
	c) Rs.14,001-20,000	5	10
	d) Above rs.20,000	3	6

7	Relationship of the patient		
	a)Mother	13	26
	b)Father	2	4
	c)Spouse	17	34
	d)Others	18	36
8	Previous family history of CRF		
	a)Yes	16	32
	b)No	34	68
9	Previous information regarding CRF by		
	a)Friends	12	24
	b)Relatives	12	24
	c)Media	11	22
	d)Health personnel	15	30

Table 2 summarizes the demographic characteristics of care givers according to their demographic variables. Among 50 , with regards to age in years,9 (18 %) were 21-30 years , 21 (42%) were 31-40 years , 20 (40%) were above 40 years. Regarding gender, 30 (60%) were males, 20(40%) were females. Regarding marital status, 38 (76%) were married, 12 (24%) were unmarried, no body had divorce in their family life. Regarding education, 9 (18%) were illiterate, 16 (32%) had primary education, 17 (34%) had secondary education and remaining 8 (16%) had a degree. Regarding occupation, 7 (14%) were home maker, 30(60%) had private job, 13 (26%) were working in government job. Regarding monthly income, 24 (48%) earned Rs 3000-8000/month, 18 (36%) earned Rs 8001-14000 /month, 5 (10%) earned Rs 14001-20000/month,3 (6%) earned above Rs 20000/month. Regarding relationship of the patient, 13 (26%) were mother, 2 (4%) were father, 17 (34%) were spouse, 18 (36%) had others. Regarding previous family history of chronic renal failure, 16 (32%) had the history of chronic renal failure, 34 (68%) had no history of chronic renal failure. Regarding previous information of chronic renal failure, 12 (24%) heard through friends, 12 (24%) through relatives, 11 (22%) through media, 15 (30%) through health field members.

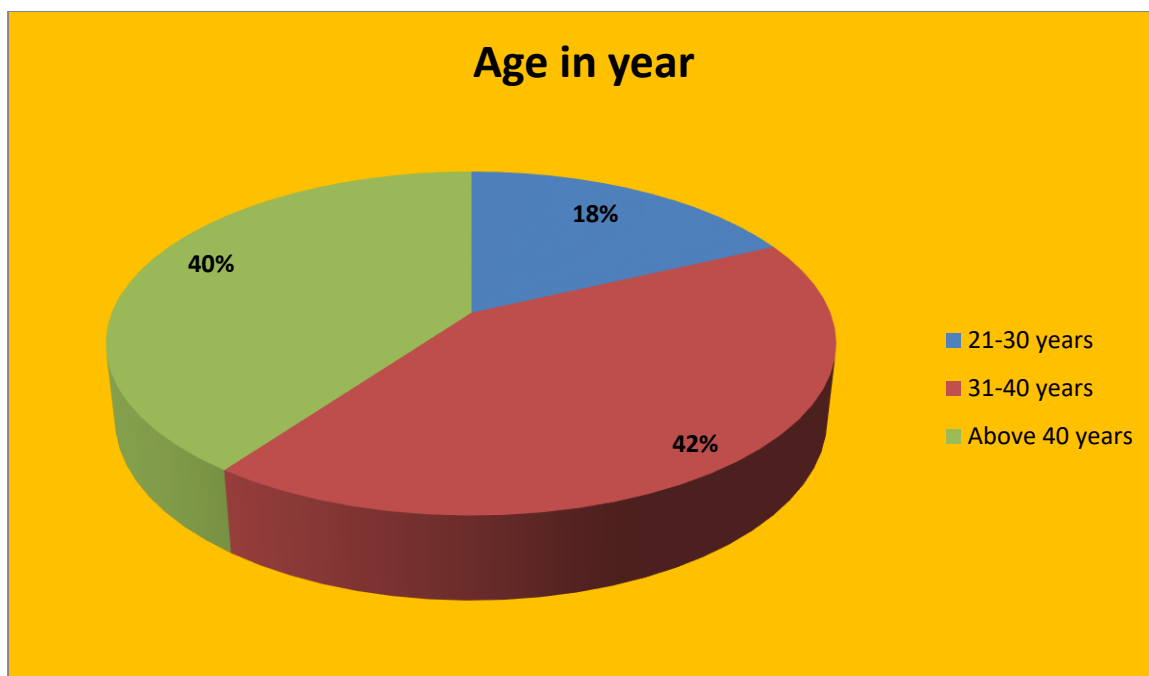


FIGURE 2 : Distribution of care givers according to their age

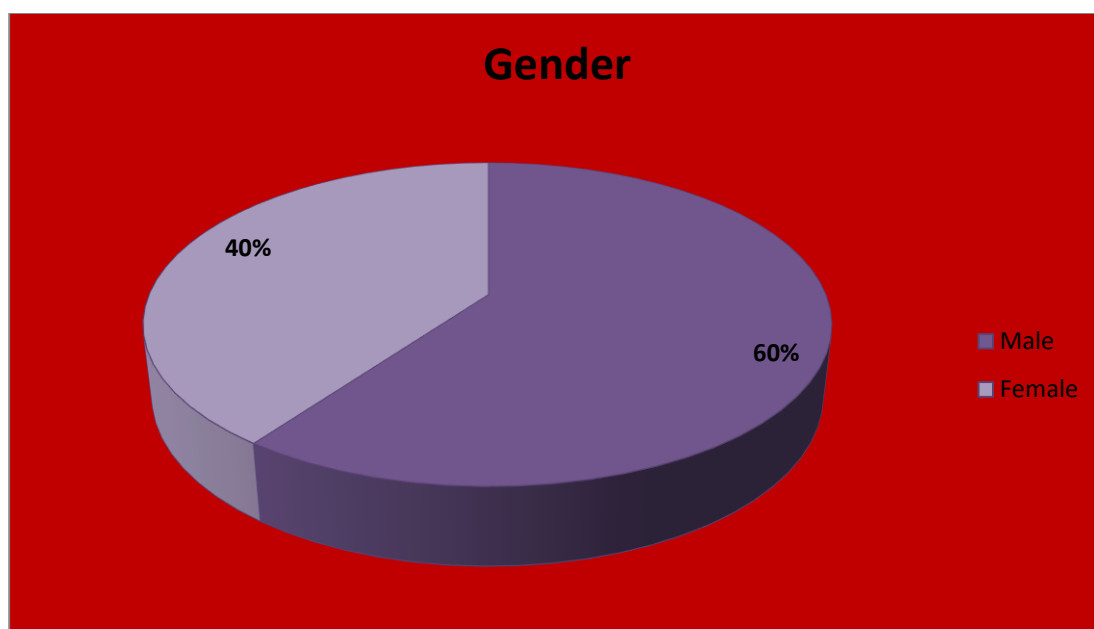


FIGURE 3 : Distribution of care givers according to their gender

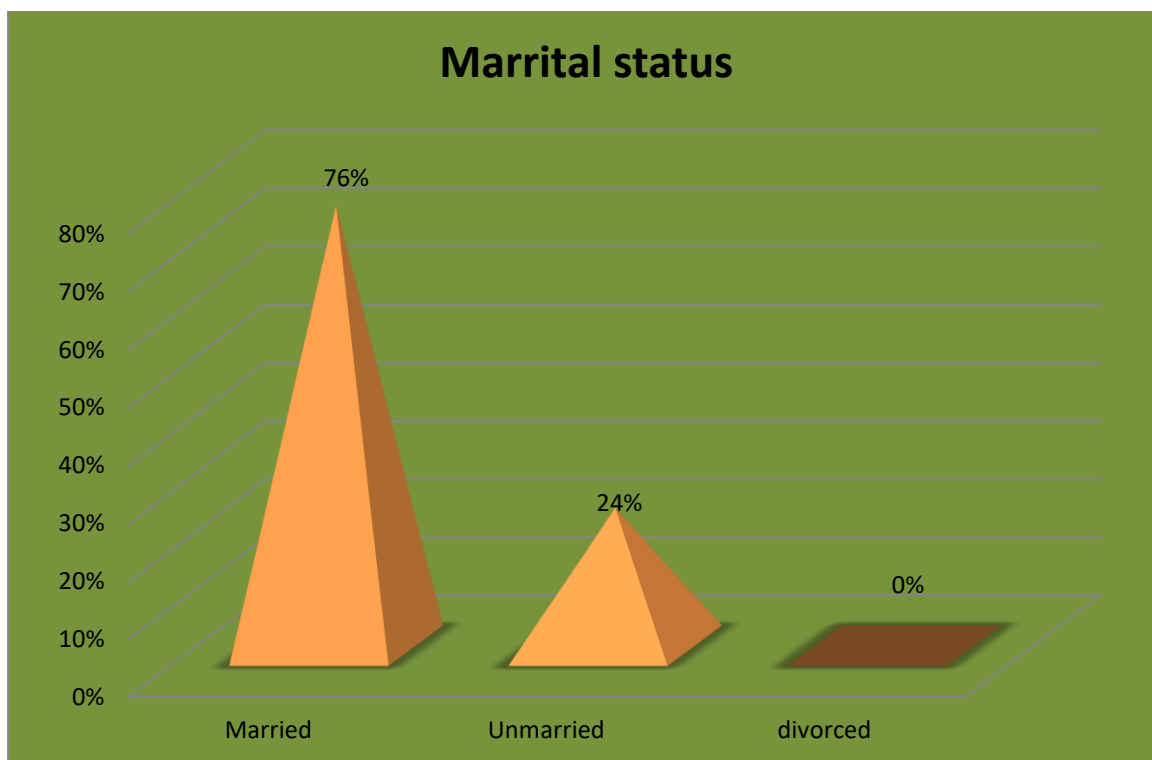


FIGURE 4: Distribution of care givers according to their marital status

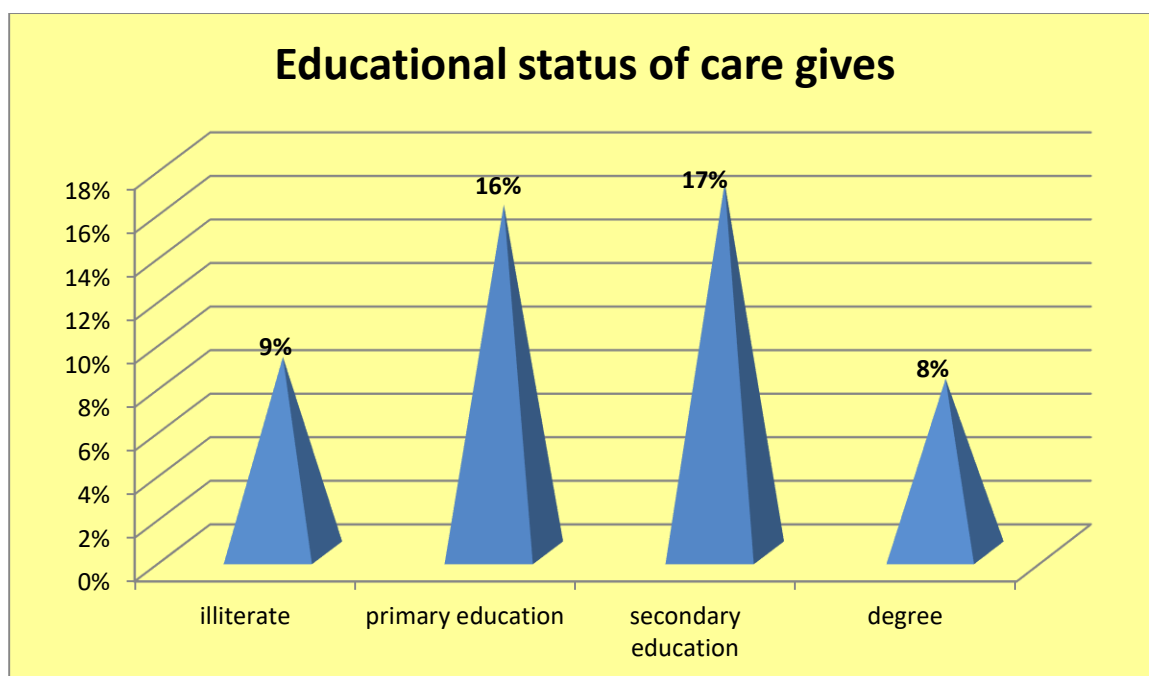


FIGURE 5: Distribution of care givers according to their education status

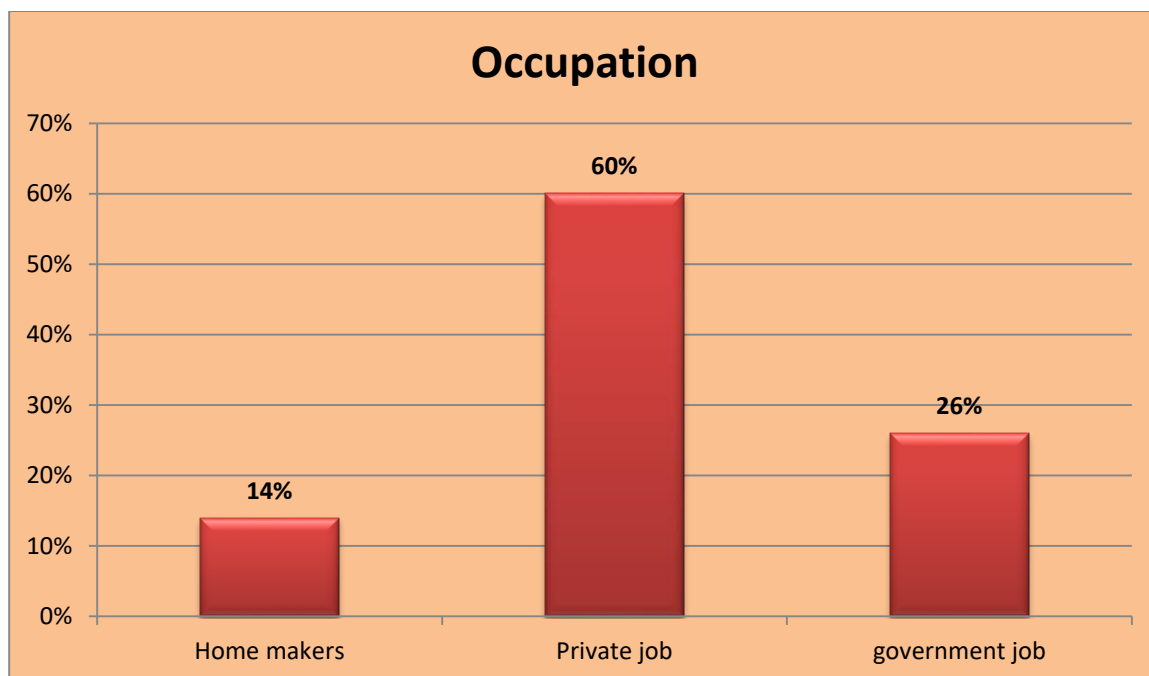


FIGURE 6: Distribution of care givers according to their occupation

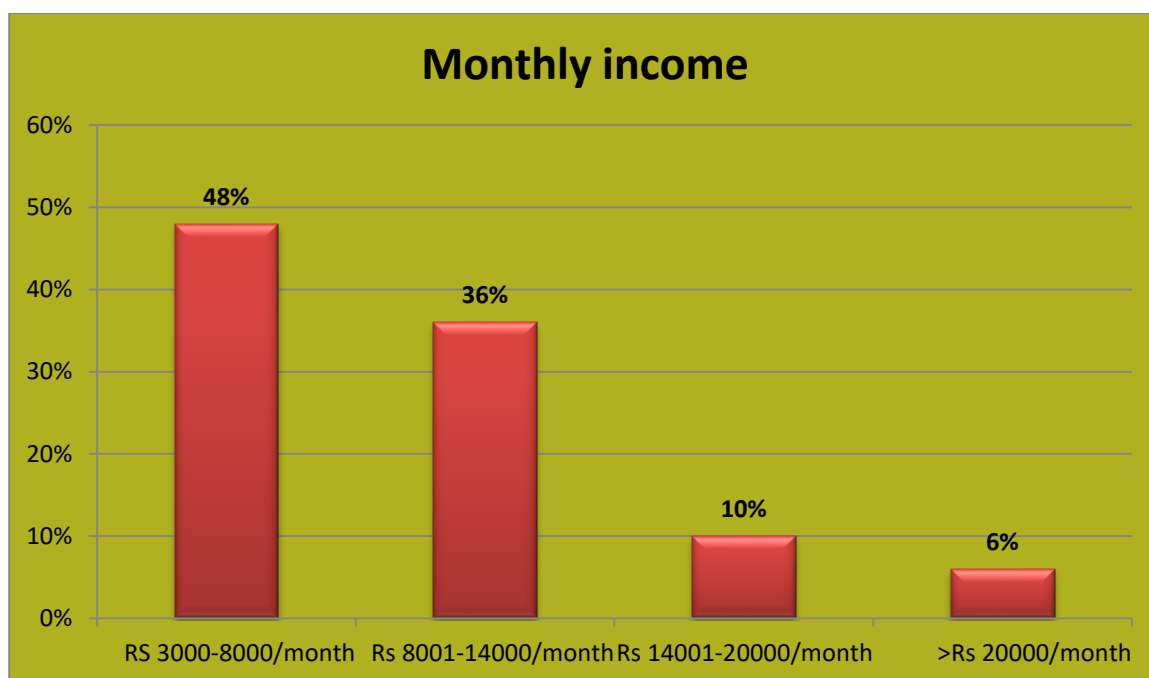


FIGURE 7: Distribution of care givers according to their Monthly Income

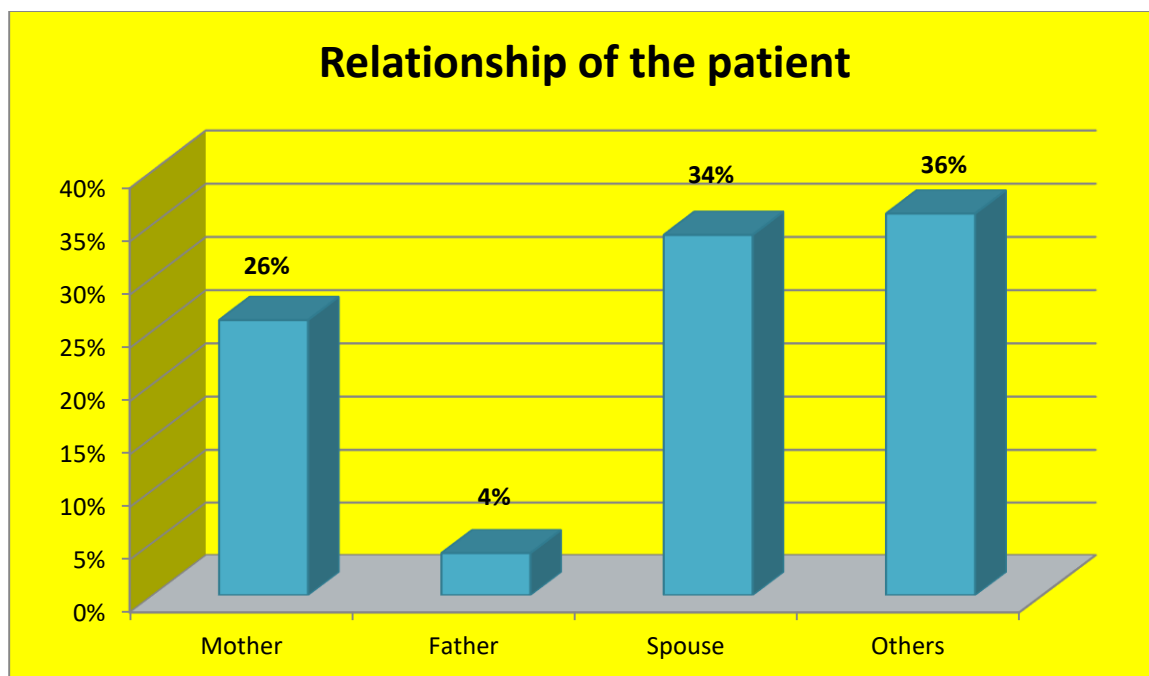


FIGURE 8: Distribution of care givers according to their relationship of the patients

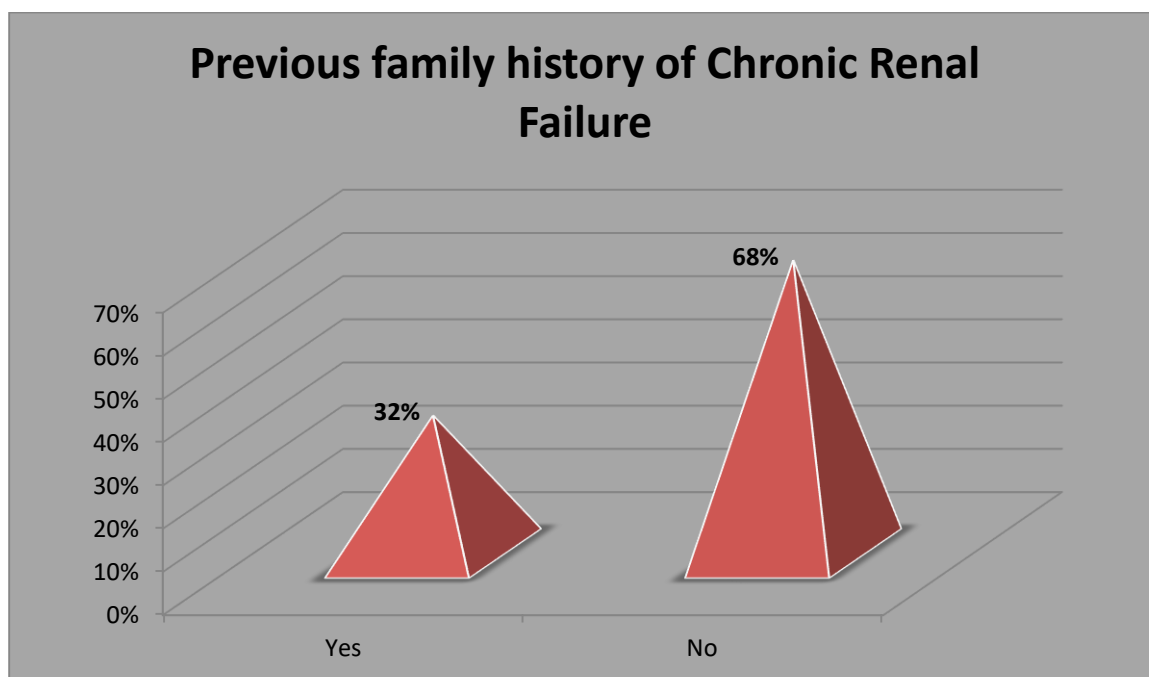


FIGURE 9: Distribution of care givers according to their previous family history of chronic renal failure

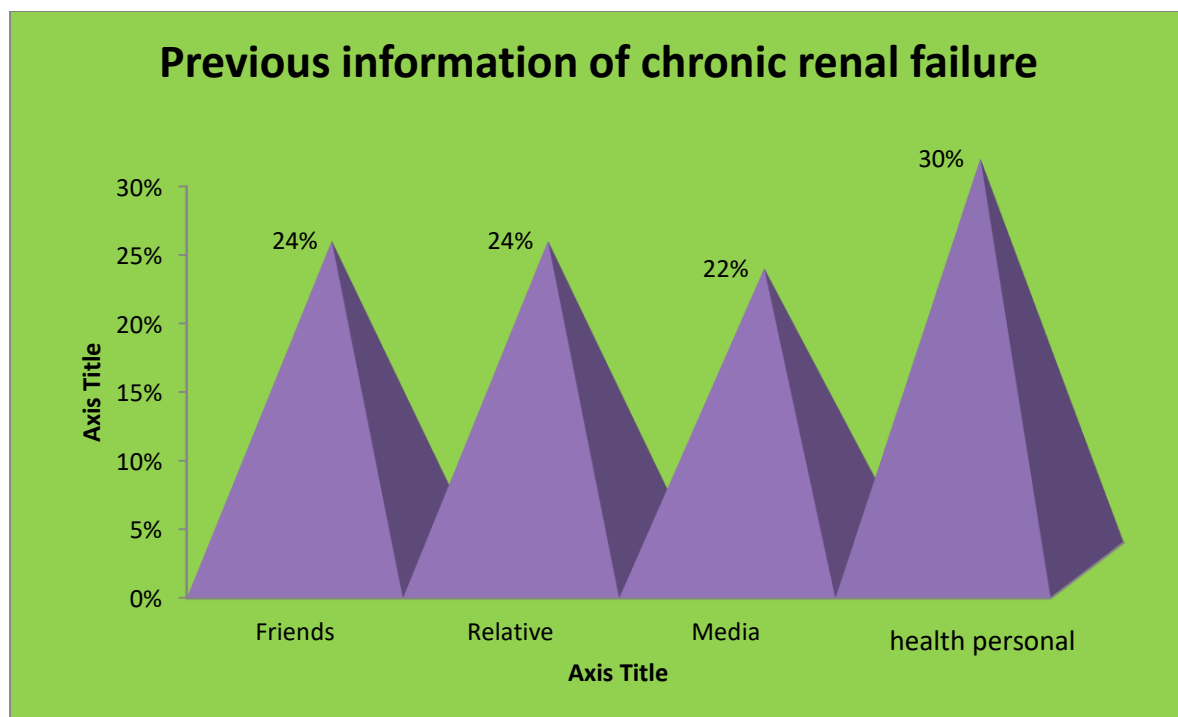


FIGURE 10: Distribution of care givers according to their previous information of chronic renal failure

SECTION II

Description of the Chronic renal failure patients undergoing haemodialysis according to their demographic variables.

Table 3: Distribution of the Chronic renal failure patients undergoing haemodialysis. According to their demographic variables

(N=50)

S.NO	Demographic variables	Frequency(f)	Percentage(f %)
1	Age in years		
	a)15-20	7	24
	b)21-30	7	24
	c)31-40	15	30
	d)above 40	21	42
2	Gender		
	a)Male	28	56
	b)Female	22	44
3	Marital status		
	a)Married	37	74
	b)un married	13	26
4	Duration of the illness		
	a)less than 1 year	12	24
	b)greater than 1 year	38	76
5	Duration of dialysis		
	a)1-2 years	21	42
	b)3-4 years	29	58
	c)5-6 years	2	4
	d) above 6 years	-	-
6	Types of vascular access		
	a)artery venous fistula	34	68
	b)artery venous graft	7	24
	c)central venous catheter	9	18
7	Frequency of dialysis		
	a)Weekly once	7	24
	b)weekly twice	38	76
	c)weekly thrice	5	10

Table 3: summarize the demographic characteristic of haemodialysis patients. Among 50, with regards to age in years, 7 (24%) were 15-20 years, 7(24 %) were 21-30 years, 15 (30%) were 31 -40 years, 21 (42%) were above 40 years. Regarding gender, 28 (56%) were males, 22(44%) were females. Regarding marital status, 37(74%) were married, 13 (26%) were married. Regarding duration of illness, 12 (24%) had illness less than 1 year, 38 (76%) had illness greater than 1 year. Regarding duration of dialysis, 21 (42%) had done dialysis for the past 1- 2 years, 29 (58 %) had done dialysis for the past 3-4 years, 2 (4%) had done dialysis for the past 4-5 years and no body had done dialysis for more than 6 years. Regarding types of vascular access site, 34 (68%) had artery venous fistula, 7 (24%) had artery venous graft, 9 (18%) had central venous catheter. Regarding the frequency of dialysis, 7 (24%) undergo weekly once, 38 (76%) undergo weekly twice, 5 (10%) undergo weekly thrice.

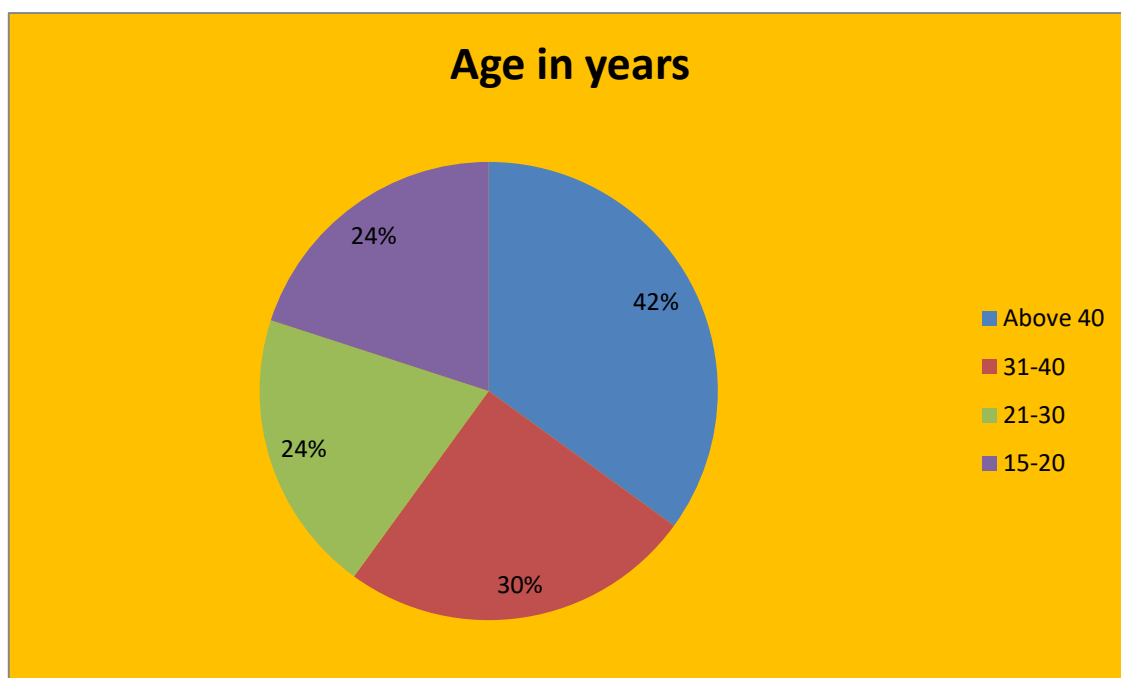


FIGURE 11: Distribution of patients according to their age

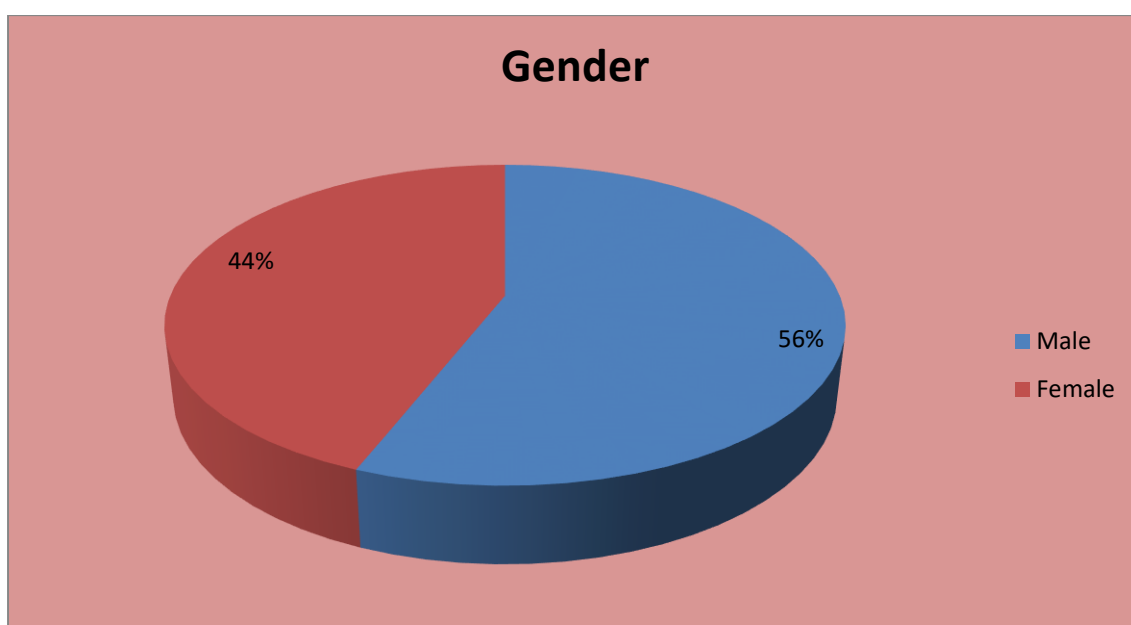


FIGURE 12: Distribution of patients according to their gender

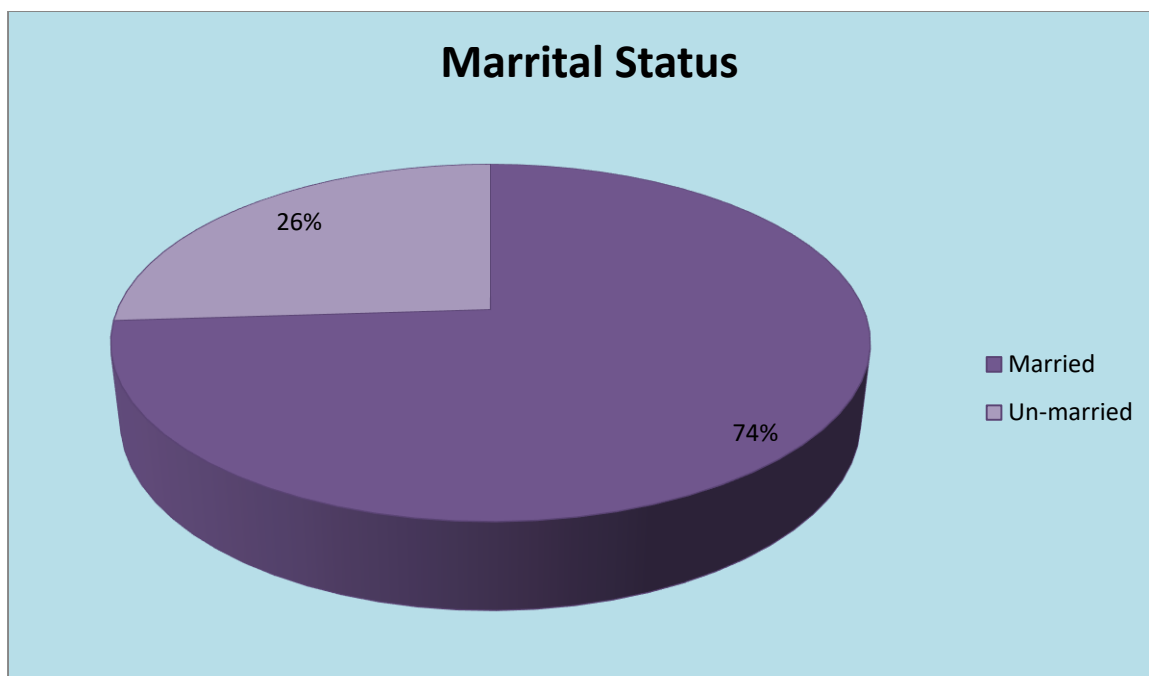


FIGURE:13 Distribution of patients according to their marital status

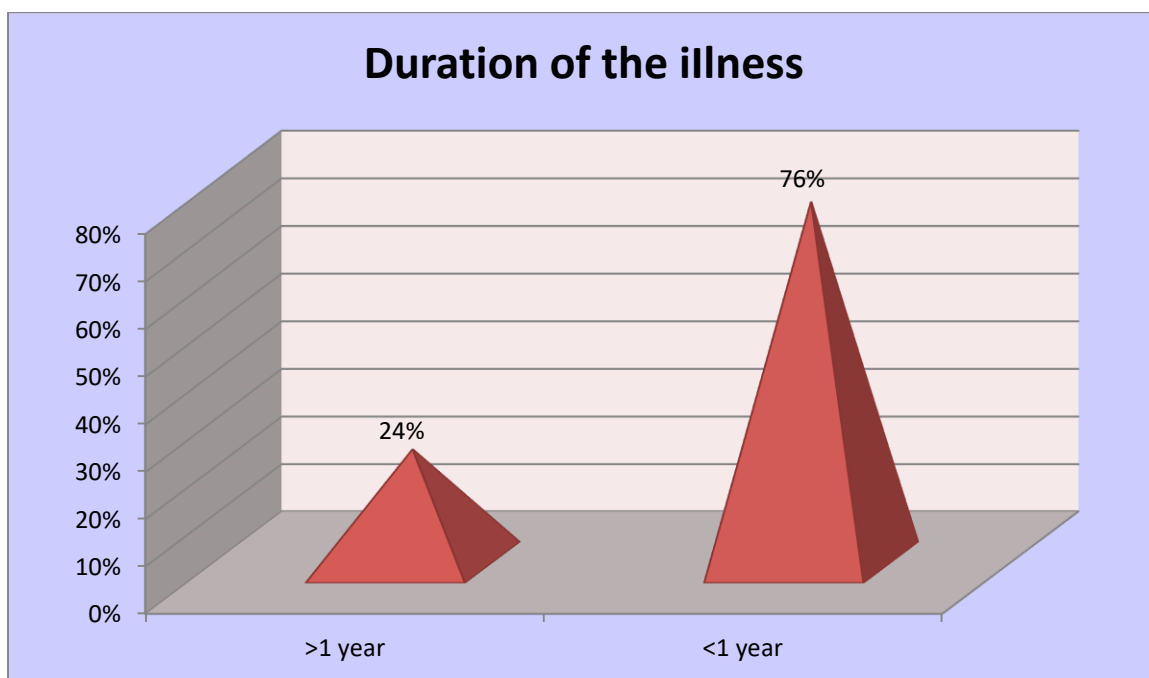


FIGURE: 14 Distribution of patients according to their Duration of the illness

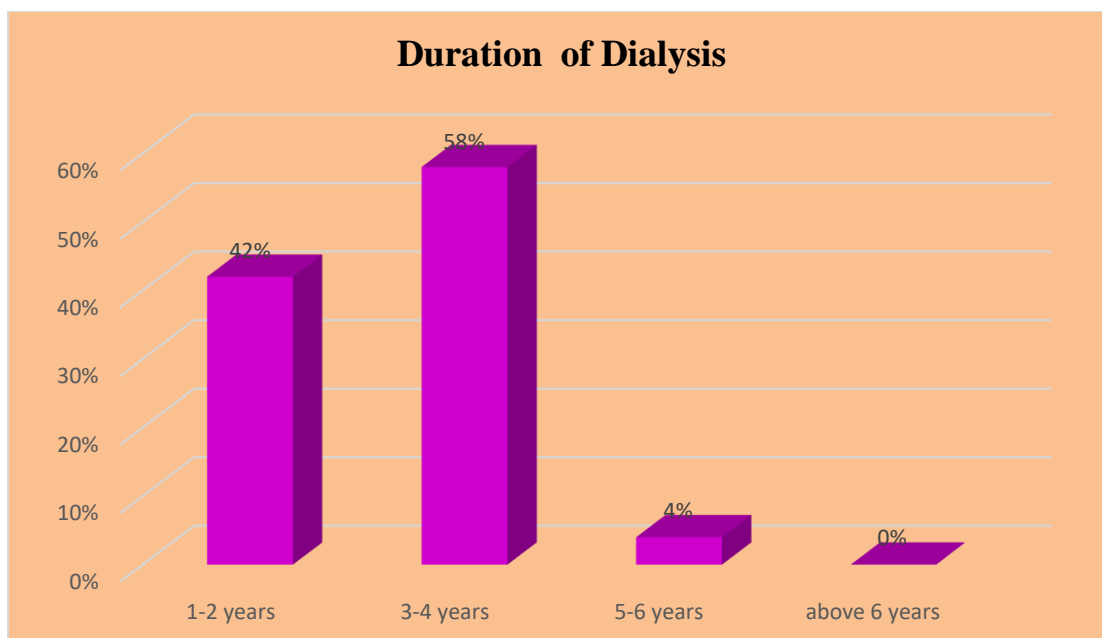


FIGURE:15 Distribution of patients according to their Duration of Dialysis

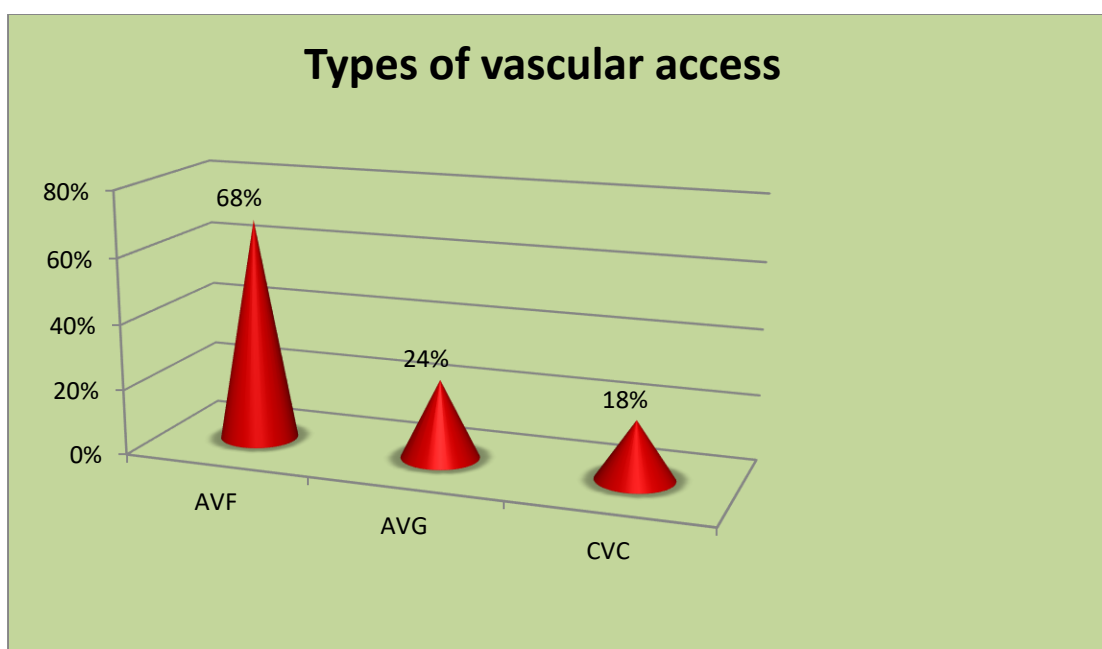


FIGURE:16 Distribution of patients according to their types of vascular access

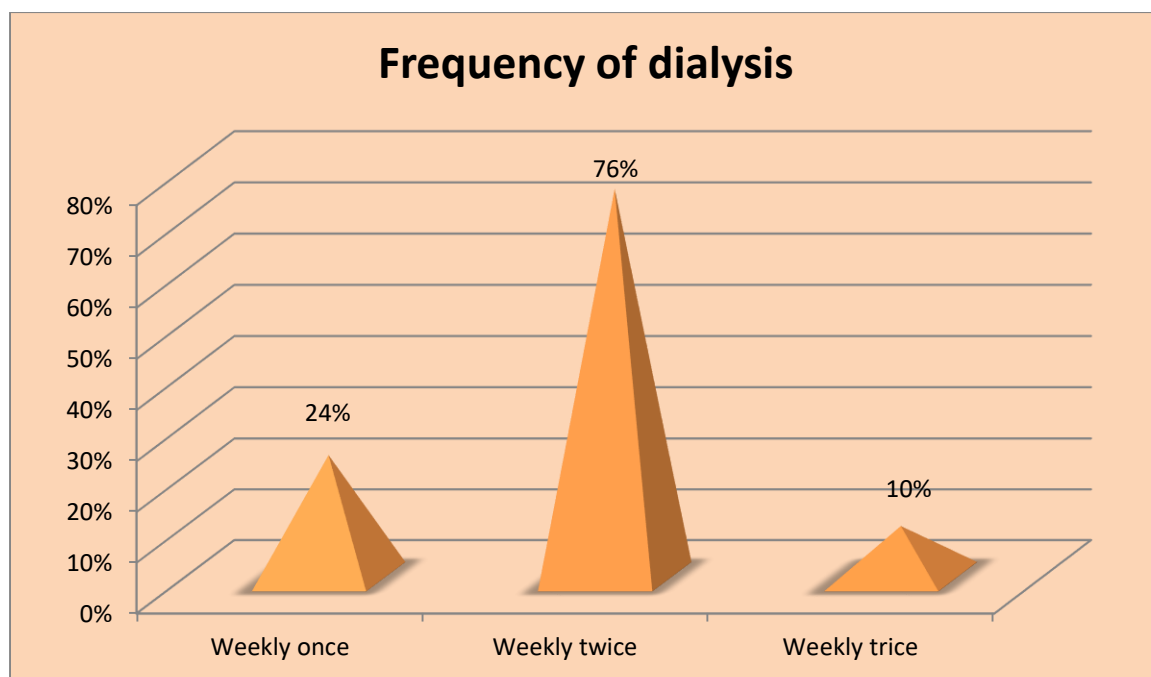


FIGURE:17 Distribution of patients according to their frequency of dialysis

SECTION III

Description of the care givers according to their pretest and post test level of knowledge on post dialysis home care.

Table 4: Distribution of the care givers according to their pretest and post test level of knowledge on post dialysis home care.

(N=50)

S.NO	Level of knowledge	Pre test			Post test		
		F	Mean	%	F	mean	%
1	Adequate (above 75%)	0	0	0%	45	25.1	90%
2	Moderate (50 – 70 %)	10	33	20%	5	22.6	10%
3	Inadequate (below 50 %)	40	9.7	80%	0	0	0%

Table 4 depicts the pre test and post test level of knowledge regarding the post dialysis home care. In the pretest majority, 40 (80%) of the care givers had inadequate knowledge level, 10 (20%) had moderate level of knowledge and nobody scored adequate (above 75 %) marks. But in the post test, majority 45 (90%) of the care givers had adequate knowledge level with scores above 75 % and only 5(10%) of them had moderate knowledge level with score between 50 -75 %. The above findings summarize that, the self instructional module has significant beneficial effect in enhancing the level of knowledge regarding the post dialysis home care among care givers.

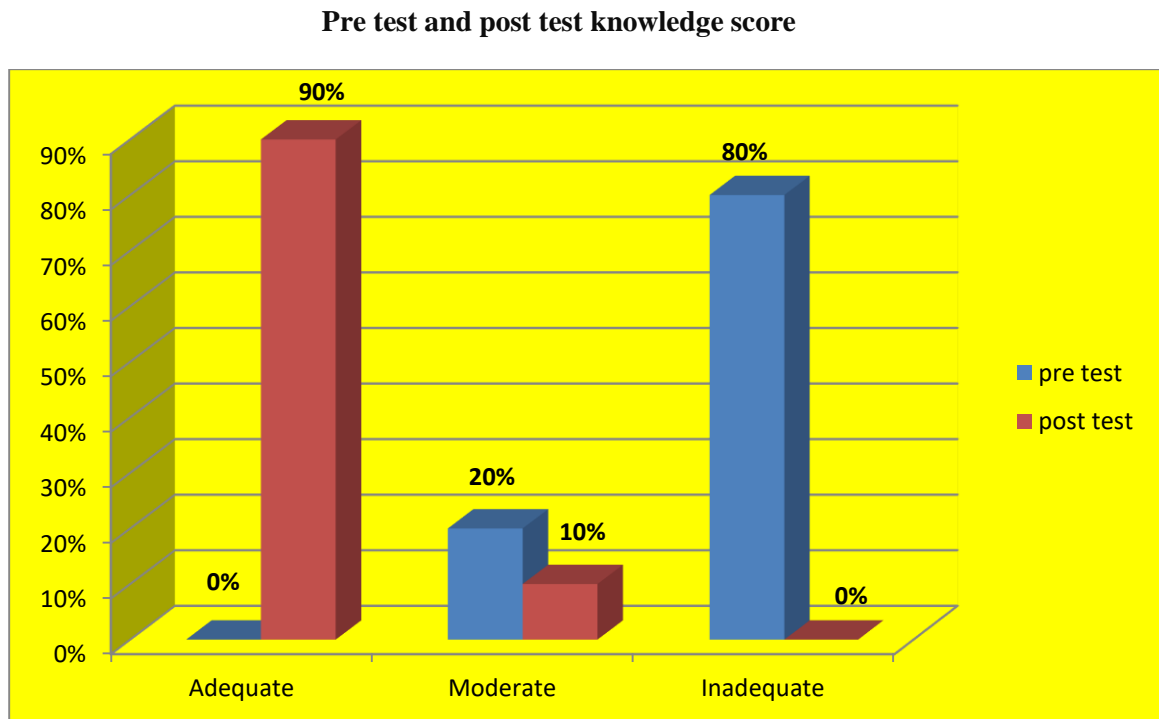


Figure 18 distribution of care givers according to their pre test and post test knowledge score.

SECTION IV

Comparison of pretest and post test level of knowledge on post dialysis home care.

Table 5: comparison of pretest and post test level of knowledge on post dialysis home care.

(N=50)

S.NO	Level of knowledge	Mean	Mean difference	SD	't' value
1	Pre test	7.76	16	4.46	25.39**
2	Post test	22.66			

(** =significant at 0.05)

The above the table 5 depicts comparison of mean pre test and post test level of knowledge on post dialysis home care. The post test mean score (22.66) was high when compare to the pre test mean (7.76) score of knowledge. The obtained t value (25.39) was greater than the table value at 0.05 level of significance, which shows that there is significant difference between the pretest and post test level of knowledge regarding post dialysis home care among care givers of haemodialysis patients.

Hence, the formulated research hypotheses H1 was accepted

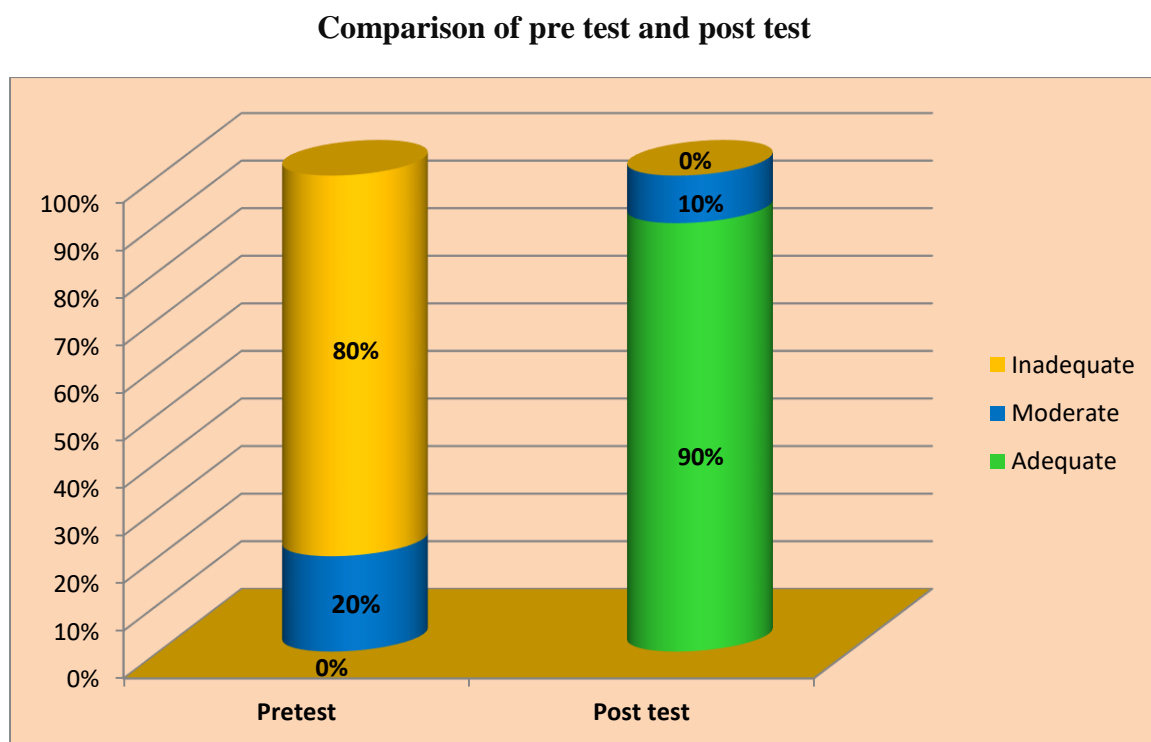


Figure 19 : comparison of pre test and post test knowledge level of care givers.

SECTION V

Association between pretest level of knowledge and their selected demographic variables

Table 6: Association between pretest level of knowledge and their selected demographic variables

(N=50)

S. NO	Demographic variables	Level of knowledge			χ^2	Table value	Level of significance
		Adequate knowledge	Moderate knowledge	Inadequate knowledge			
1	Age in years				1.58	9.59	(NS)
	a)21 – 30	0	4	5			
	b)31 - 40	0	10	11			
	c)Above -40	0	5	15			
2	Gender				0	5.99	(NS)
	a)Male	0	5	20			
	b)Female	0	5	20			
3	Marital status						
	a)Married	0	10	2	25.124	9.49	(S)*
	b)Unmarried	0	28	10			
	c)divorced	0	0	0			
4	Education						
	a)Illiterate	0	3	6	13.471	12.59	(S)*
	b)Primary education	0	7	9			
	c)secondary education	0	8	9			
	d) Degree	0	2	6			
5	Occupation				0.604	2.78	(NS)
	a)Home maker	0	2	5			
	b)private company	0	5	25			
	c)government job	0	3	10			

6	Monthly income						
	a)3000-8000	0	10	14			
	b)8001-14,000	0	5	13	1.372	2.45	(NS)
	c)14,001-20,000	0	1	4			
	d)Above 20,000	0	1	2			
7	Relationship of the patient						
	a)Mother	0	3	10	0.887	2.45	(NS)
	b)Father	0	1	1			
	c)Spouse	0	5	12			
	d)Others	0	4	14			
8	Previous disease history of Chronic renal failure				0.296	5.99	(NS)
	a)Yes	0	6	10			
	b)No	0	10	24			
9	Previous information of Chronic renal failure by						
	a)Friends	0	3	9	1.399	2.45	(NS)
	b)Relatives	0	2	10			
	c)Media	0	4	7			
	d)Health field	0	5	10			

(*=Significant at 0.05 level)

Table 6 the above table depicts the association of care givers pre test level of knowledge on post dialysis home care with their selected demographics variables. The obtained chi square value for marital status (24.124) and education status (13.471) were greater than the table value at 0.05 level of significance. So there is a significant association exist between the care givers pre test level of knowledge and their marital status and education.

Regarding care givers gender, age, occupation monthly income previous knowledge of chronic renal failure and previous family history of chronic renal failure, the calculated value of chi square was less than the table value at 0.05 levels of significant association exist between these variables and care givers knowledge.

CHAPTER V

DISCUSSION, SUMMARY, CONCLUSION, IMPLICATION, RECOMMENDATION

DISCUSSION

Chronic renal failure is a global threat to health in general and for developing countries. It also one of the complex progress in kidneys functions. Chronic renal failure is gradually loss of function and its main causes of diabetic mellitus and high blood pressure and other causes, recurrent urinary tract infection, urinary stones, glomeruli nephrities, polycystic kidney disease. Apart from diabetic and high blood pressure, obesity and smoking peoples are more risky peoples for develop in this chronic condition.

Dialysis is one of the main treatment for those kind of patients. There are two type of dialysis is performed in our country. That is haemodialysis and peritoneal dialysis. The haemodialysis is mostly preferable for those kind of patients. Chronic renal failure is associating complications of hyperlipidemia, mineral bone disease, anemia, cardio vascular disorder.

The aim of the present study was to evaluate the effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of Chronic renal failure patients under going haemodialysis in karthik hospital at sivagangai. The researcher had selected sample 50 care givers who were in karthik hospital. Non probability purposive sampling technique was used to drive the samples.

DEMOGRAPHICAL VARIABLES

DEMOGRAPHICAL VARIABLES FOR CARE GIVERS

- ❖ Among 50, with regards to age in years, 9 (18 %) were 21-30 years, 21 (42%) were 31-40 years, 20 (40%) were above 40 years.
- ❖ Regarding gender, 30 (60%) were males, 20(40%) were females. Regarding marital status, 38 (76%) were married, 12 (24%) were unmarried, nobody had divorce in their family life.

- ❖ Regarding education, 9 (18%) were illiterate, 16 (32%) had primary education, 17 (34%) had secondary education and remaining 8 (16%) had a degree.
- ❖ Regarding occupation, 7 (14%) were home maker, 30(60%) had private job, 13 (26%) were working in government job.
- ❖ Regarding monthly income, 24 (48%) earned Rs 3000-8000/month, 18 (36%) earned Rs 8001-14000 /month, 5 (10%) earned Rs 14001-20000/month ,3 (6%) earned above Rs 20000/month.
- ❖ Regarding relationship of the patient, 13 (26%) were mother, 2 (4%) were father, 17 (34%) were spouse, 18 (36%) had others.
- ❖ Regarding previous family history of chronic renal failure, 16 (32%) had the history of chronic renal failure,34 (68%) had no history of chronic renal failure
- ❖ Regarding previous information of chronic renal failure, 12 (24%) heard through friends, 12 (24%) through relatives, 11 (22%) through media, 15 (30%) through health field members.

DEMOGRAPHICAL VARIABLES FOR PATIENTS:

- ❖ Among 50, with regards to age in years, 7 (24%) were 15-20 years, 7(24 %) were 21-30 years, 15 (30%) were 31 -40 years, 21 (42%) were above 40 years.
- ❖ Regarding gender, 28 (56%) were males, 22(44%) were females.
- ❖ Regarding marital status, 37(74%) were married, 13 (26%) were married.
- ❖ Regarding duration of illness, 12 (24%) had illness less than 1 year, 38 (76%) had illness greater than 1 year.
- ❖ Regarding duration of dialysis, 21 (42%) had done dialysis for the past 1- 2 years, 29 (58 %) had done dialysis for the past 3-4 years, 2 (4%) had done dialysis for the past 4-5 years and no body had done dialysis for more than 6 years.
- ❖ Regarding types of vascular access site, 34 (68%) had artery venous fistula, 7 (24%) had artery venous graft, 9 (18%) had central venous catheter.
- ❖ Regarding the frequency of dialysis, 7 (24%) undergo weekly once, 38 (76%) undergo weekly twice, 5 (10%) undergo weekly thrice.

The first objectives was to assess the pre test level of knowledge regarding chronic renal failure and post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis .

In the present study care givers knowledge regarding, Majority 40 (80%) of the care givers had inadequate knowledge level and 10 (20%) had moderate level of knowledge. nobody scored adequate (above 75 %) marks in pre test.

Above the study support **P.John et.al., (2016)**, was conducted the study of effectiveness of self instructional module on self care among chronic renal failure patients receiving haemodialysis. The study was conducted in sahara hospital, Gomitinagar, lucknow. A quantitative pre experimental research design was used for this study. A structured knowledge questionnaire was used. The study was concluded that out of 60 of chronic renal failure patients 38 (63.33%) had inadequate knowledge and 22 (36.3%) had moderate knowledge level was gained.

The second objective to assess the effectiveness of self instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.

In the present study also care givers shown improved knowledge after provide self instructional module on post dialysis home care. Majority 45 (90%) of the care givers had adequate knowledge level above 75 % and only 5(10%) of them scored moderate knowledge level above 50 -75 %). The post test mean score (22.66) was high when compare to the pre test mean (7.76) score of knowledge. The obtained t value (25.39) was greater than the table value at 0.05 level of significance, which shows that there is significant difference between the pretest and post test level of knowledge regarding post dialysis home care among care givers of haemodialysis patients. Hence, the formulated research hypotheses **H1 was accepted.**

Above the study support **Lydia gee Varghese et al., (2014)**, done a pre experimental study on education programme about chronic renal failure and post dialysis home care in care givers of 60. A structure questionnaire and observational checklist was used to collect data. The study revealed that most of care givers (77.6%) had unsatisfactory knowledge about chronic renal failure and post dialysis home care.

While the post test 50(83%) have adequate knowledge and remains are moderate knowledge level was gained.

Navneet kaur et.al., (2015) performed an exploratory study to assess effectiveness of self instructional module on the knowledge regarding post dialysis home care among care givers of haemodialysis patients in mohali. The aim of the study was to assess the knowledge regarding post dialysis home care among care givers was selected for this study. There are 100 care givers was selected by descriptive and inferential statistics. A self administrated questionnaires was used to assess the knowledge regarding post dialysis home care among care givers of hemodialysis patients. They concluded that the study was 79 % have good knowledge, 19 % have moderate knowledge, 4% had poor knowledge.

The study results shows that there was significant improvement in knowledge level of the care givers regarding post dialysis home care after administration of self instructional module. Through the study the researcher personally found that the self instructional module was effective in improving knowledge of care givers on hemodialysis patients.

The third objectives was to find out the association between the pre test level of knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis with their selected demographic variables.

The present study reveals that there is a significant association between the pretest score and their selected demographics variables. The chi-square test was computed. With regards to pretest knowledge level and marital status, the obtained the chi-square value was 9.49 at df (4) was significant at 0.05 level. Regarding education status chi-square value was 13.57 at df (6) was significant at 0.05. Hence the formulate research hypothesis, **H2 was accepted**. The other demographic variables such as age, gender, occupation, relation, income, previous family history of chronic renal failure, previous information of chronic renal failure.

The study tested and proved the **hypotheses. H1** that there is a significant improvement in the pre test and post test knowledge of care givers receives self instructional module.**H2 that there is a significant** relationship that exist between the

knowledge score on post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.

Summary of the Study

The study was conducted to evaluate the effectiveness of self instructional module on knowledge post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis in karthik hospitals at sivagangai. The study was based on shuffle Beam's CIPP programme evaluation model, (1960). An evaluatory approach used to conduct the study .The research design adopted for the present study was pre experimental one group pre test post test and purposive sampling technique was used for selection of samples. The data was collected for the period of 6 weeks from the care givers in karthik hospital at sivagangai. The investigators rendered self instructional module on post dialysis home care. The post test was conducted after one week with semi structured questionnaire. Based on the objectives and hypotheses, the data were analyzed using both descriptive and inferential statistics.

Major finding of the study:

- ❖ Among 50 care givers, with regards to age in years, 9 (18 %) were 21-30 years, 21 (42%) were 31-40 years, 20 (40%) were above 40 years.
- ❖ Regarding gender, 30 (60%) were males, 20(40%) were females. Regarding marital status, 38 (76%) were married, 12 (24%) were unmarried, no body had divorce in their family life.
- ❖ Regarding education, 9 (18%) were illiterate, 16 (32%) had primary education, 17 (34%) had secondary education and remaining 8 (16%) had a degree.
- ❖ Regarding occupation, 7 (14%) were home maker, 30(60%) had private job, 13 (26%) were working in government job.
- ❖ Regarding monthly income, 24 (48%) earned Rs 3000-8000/month, 18 (36%) earned Rs 8001-14000 /month, 5 (10%) earned Rs 14001-20000/month, 3 (6%) earned above Rs 20000/month.
- ❖ Regarding relationship of the patient, 13 (26%) were mother, 2 (4%) were father, 17 (34%) were spouse, 18 (36%) had others.
- ❖ Regarding previous family history of chronic renal failure, 16 (32%) had the history of chronic renal failure, 34 (68%) had no history of chronic renal failure.

- ❖ Regarding previous information of chronic renal failure, 12 (24%) heard through friends, 12 (24%) through relatives, 11 (22%) through media, 15 (30%) through health field members.
- ❖ Care givers shown improved knowledge after provide self instructional module on post dialysis home care. Majority 45 (90%) of the care givers had adequate knowledge level above 75 % and only 5(10%) of them scored moderate knowledge level above 50 -75 %). The post test mean score (22.66) was high when compare to the pre test mean (7.76) score of knowledge. The obtained t value (25.39) was greater than the table value at 0.05 level of significance, which shows that there is significant difference between the pretest and post test level of knowledge regarding post dialysis home care among care givers of haemodialysis patients. Hence, the formulated research hypotheses **H1 was accepted.**
- ❖ The study results shows that there was significant improvement in knowledge level of the care givers regarding post dialysis home care after administration of self instructional module. Through the study the researcher personally found that the self instructional module was effective in improving knowledge of post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis.
- ❖ The pretest level of knowledge and marital status, the obtained the chi-square value was 9.49 at df (4) was significant at 0.05 level. Regarding education status chi-square value was 13.47 at df (6) was significant at 0.05. Hence the formulate research hypothesis, **H2 was accepted.** The other demographic variables such as age, gender, occupation, relation, income, previous family history of chronic renal failure, previous information of chronic renal failure.

Conclusion:

The above study depicts that, obtained value was greater than the table value which shows significant improvement in knowledge level. Hence the self instructional module was effective in improving the knowledge.

Implications:

The present study has several implications in hospital settings, nursing practice, nursing educations, nursing research and nursing administration.

Nursing practice

- Nurse must acquire adequate knowledge that help to improve the knowledge of care givers of chronic renal failure patients under going haemodialysis.
- Being the back bone of health team, nurse ones a great responsibility in educating the people regarding post dialysis home care.

Nursing education

- SIM (self instructional module) can be used by the student to imparting knowledge on haemodialysis patients and their care givers in both rural and urban while giving health education.
- Nurse educator can prepare the students in order to give importance of teaching on post dialysis home care by using different teaching aids.

Nursing research

- The findings of the present study are helpful for the nursing professionals and nursing teachers to conduct further studies to find out the effectiveness of various methods of providing education on improving the knowledge regarding post dialysis home care among patients and nurses.

Nursing administration

- Nurse administrator should take interest in motivating the nursing personnel to improve their professional skill by attending the workshops, conference, seminars and training programme on post dialysis care.
- Nurse administrator should arrange the regular in service education programme to the health care workers to giving skill in taking care of haemodialysis patients.

Recommendations:

- A study can be conducted in assessing knowledge and practice of post dialysis home care.
- A comparative study can be done to assess the attitude and practice of post dialysis home care.
- A similar study can be replicated with experimental and control group.
- A similar study can be undertaken in other districts of Tamilnadu.

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APPENDIX I

RESEARCH TOOL

SECTION –A

DEMOGRAPHIC DATA

Kindly read the following questions and place a tick mark in the appropriate response.

SECTION –A (Demographic variables for care givers)

Part -A

1. Age in year

- a) 21 – 30 ()
- b) 31 – 40 ()
- c) above 40 ()

2. Gender

- a) Male ()
- b) Female ()

3. Marrital status

- a) Single ()
- b) Married ()
- c) Divorced ()

4. Education

- a) Illiterate ()
- b) Primary education ()
- c) Secondary education ()
- d) Graduate ()

5. Occupation

- a) Home made ()
- b) Private employee ()
- c) Government employee ()

6 . Monthly income

- a) 3000 – 8000 /month ()
- b) 8001 – 14,000 /month ()
- c) 14,001 – 20,000 /month ()
- d) Above 20,000 ()

7.Realtion of the patient

- a) Mother ()
- b) Father ()
- c) Spouse ()
- d) Others ()

8. any family history of CRF

- a) Yes ()
- b) No ()
- If yes..... ()

9.previous information regarding chronic renal failure

- a) Friends ()
- b) Relatives ()
- c) Mass media ()
- d) Health personal ()

Part –B (Demographics variables of patient)

1. Age in years

- a) 15-20 ()
- b) 21-30 ()
- c) 31-40 ()
- d) Above 40 ()

2. Gender

- a) Male ()
- b) Female ()

3. Education

- a) Illiterate ()
- b) Primary education ()
- c) Secondary education ()
- d) Graduate ()

4 . Occupation

- a)Government employee ()
- b)Private employee ()
- c)Self employee ()
- d) Home made ()

5 . Marrital status

- a) Married ()
- b) Unmarried ()
- c) Widow ()

6. Duration of illness

- a) Less than 1 yr ()
- b) More than 1 yr ()

7. Duration of undergoing haemodialysis

- a) 1-2 yrs ()
- b) 3-4 yrs ()
- c) 5-6yrs ()
- d) Above 6 yrs ()

8 . Types of vascular access

- a) AV –fistula ()
- b) Av graft ()
- c) Central venous catheter ()

9. Number of haemodialysis per week

- a) Once a week ()
- b) Twice a week ()
- c) Thrice a week ()

SECTION B**STRUCTURED QUESTIONNAIRE****Part – A (Questions related to information about renal & its function)**

1. The number of kidneys is
a) 2 ()
b) 1 ()
c) 3 ()
d) 4 ()
- 2 . The kidneys situated in
a) Abdomen ()
b) Peritoneal cavity ()
c) Thorax ()
d) Pelvic cavity ()
- 3 . The shape of the kidneys is
a) Pear ()
b) Bean ()
c) Round ()
d) Square ()
- 4 . The weight of the kidneys is
a) 140g ()
b) 150g ()
c) 110g ()
d) 100 g ()
- 5 . The function of the kidney is
a) Production of the urine ()
b) Maintain the electrolytes ()
c) Regulate the blood pressure ()
d) All of these ()
6. The urine is formed per day of
a) 100 ml ()
b) 3000 ml ()
c) 1.5 liters ()
d) 6 liters ()

Part –B**(Question related to information about chronic renal failure)**

7. The types of renal failure is

- a) 1 ()
- b) 2 ()
- c) 4 ()
- d) 3 ()

8. The chronic renal failure means

- a) Loss of function ,irreversible ()
- b) Cyst formation of kidney ()
- c) Inflammation of kidney ()
- d) Stones in the kidney ()

9. The risky people for develop the chronic renal failure is

- a) Diabetes mellitus ()
- b) Elderly ()
- c) Hypertension ()
- d) All of these ()

10. The causes of chronic renal failure is

- a) Obesity ()
- b) Repeated infection ()
- c) Cystitis ()
- d) anaemia ()

11. one of the signs & symptoms of chronic renal failure is

- a) Frequent urination ()
- b) Increase thirst ()
- c) hypotension ()
- d) Swollen of feet & angles ()

12. The chronic renal failure diagnosed by

- a) Liver function test ()
- b) Hormonal test ()
- c) Renal function test ()
- d) None of these ()

13 .one of the major treatment of chronic renal failure

- a) Exercise , food restriction ()
- b) Medication ,exercise ()
- c) Dialysis , food restriction ()
- d) Medications ,dialysis ()

Part – C

(Questions related to information about post dialysis home care of chronic renal failure undergoing haemodialysis)

14. One of the causes of fatigue is

- a) Low concentration of sodium ()
- b) Muscle weakness ()
- c) Carnitine deficiency ()
- d) Excessive removal of fluid during dialysis ()

15 . The treatment of fatigue is

- a) Optimum nutritional status ()
- b) Massage ()
- c) Fluid intake ()
- d) Relaxation therapy ()

16. Muscle cramps means,

- a) Numbness of legs ()
- b) Involuntary contraction of muscles ()
- c) Muscle pain ()
- d) Swollen of the muscles ()

17 . The treatment of muscle cramps is

- a) Rubbing of the affected area ()
- b) Hot water application ()
- c) Regular exercise ()
- d) All of these ()

18 . Causes of anaemia is,

- a) low intake of iron rich foods ()
- b) Vitamin – B deficiency ()
- c) Excessive phosphorous in body ()
- d) Calcium deficiency ()

19 .one of the first line treatment for anaemia in haemodialysis patient

- a) Red blood cell transfusion ()
- b) Iron pills ()
- c) Erythropoietin supplement ()
- d) Supplement of vitamin B-12 & folic acid ()

20 .The temporary method is

- a) Artery venous fistula ()
- b) Artery venous graft ()
- c) Central venous catheter ()
- d) None of these ()

21. One of the food is limit for haemodialysis patient

- a) Protein ()
- b) Potassium ()
- c) Fat ()
- d) Carbohydrate ()

22 . The phosphorous taken per day is

- a) 2-3 mg / day ()
- b) 100 mg /day ()
- c) 17 mg /day ()
- d) 1.4 mg/day ()

23.Function of the potassium is,

- a) Keep balance between cells & body fluids ()
- b) Strengthening of bones ()
- c) Keep maintain blood pressure ()
- d) Wound healing ()

24 . Potassium rich diet is,

- a) Whole grain ()
- b) Banana ()
- c) Brocholi ()
- d) Apple ()

25. Protein taken per day is

- a) 18 mg ()
- b) 1.6 -1.8mg ()
- c) 1.1 -1.4 mg ()
- d) 2 – 3 mg ()

26 . Protein rich food is

- a) Egg white ()
- b) Potato ()
- c) Almonds ()
- d) Milk ()

27 . Unsaturated fat help to ,

- a) Good source of calories ()
- b) Protect the heart ()
- c) Reduce cholesterol ()
- d) To keep normal calcium level ()

28. Renal perfusion done by,

- a) Apple ()
- b) Strawberry ()
- c) garlic ()
- d) onion ()

29 . Carrot help to

- a) minimize the muscle cramps ()
- b) lower the blood pressure ()
- c) reduce the vomiting ()
- d) filter the toxins out from the blood. ()

30 . One of the first line benefits of kidney transplant is,

- a) more energy ()
- b) increase life expectancy ()
- c) freedom from dialysis ()
- d) less dietary restriction ()

இரத்த சுத்திகரிப்பு நோயாளிகளுக்கான வீட்டு பாரமரிப்பு வழிமுறைகள்

பகுதி -1

பகுதி - அ (நோயாளியை கவனித்து கொள்பவர்களுக்கான வினா - விடை)

1 வயது

அ) 21 – 30 ()

ஆ) 31 – 40 ()

இ) 40 வயதிக்கு மேல் ()

2 பாலினம்

அ) ஆண் ()

ஆ) பெண் ()

3 திருமண நிலை

அ) திருமணம் ஆகாதவர் ()

ஆ) திருமணம் ஆனவர் ()

இ) விவாகரத்து ஆனவர் ()

4 கல்வி தகுதி

அ) படிப்பறிவில்லாதவர் ()

ஆ) முதல் நிலை கல்வி ()

இ) இரண்டாம் நிலை கல்வி ()

ஈ) பட்டதாரி ()

5 வேலை

- அ) குடும்ப தலைவி ()
- ஆ) தனியார் வேலை ()
- இ) அரசு பணி ()

6 மாத வருமானம்

- அ) 3000 முதல் 8000 / மாதம் ()
- ஆ) 8001 முதல் 14000/மாதம் ()
- இ) 14001 முதல் 20000/ மாதம் ()
- ஈ) 20000 த்திற்க்கும் மேல் ()

7 நோயாளியின் உறவு முறை

- அ) அம்மா ()
- ஆ) அப்பா ()
- இ) துணைவர்/மனைவி ()
- ஈ)மற்றவர்கள் ()

8 குடும்பத்தினர் யாரேனும் நிரந்தர சிறுநீரக செயலிழப்பால் பாதிப்பு

அடைந்துள்ளாரா?

- அ) ஆம் ()
- ஆ) இல்லை ()
- ஆம் என்றால் ()

9 நிரந்தர சிறுநீரக செயலிழப்பு பற்றிய முந்தைய விளக்கங்கள்?

அ) நண்பர்கள் மூலம் ()

ஆ) உறவினர்கள் மூலம் ()

இ) ஊடகங்கள் மூலம் ()

ஈ) சுகாதார பணியாளர் மூலம் ()

பகுதி - ஆ

(நோயாளிகளுக்கான வினா - விடை)

1 வயது

அ) 15 - 20 ()

ஆ) 21 - 30 ()

இ) 31 - 40 ()

ஈ) 40 - க்கும்மேல் ()

2 பாலினம்

அ) ஆண் ()

ஆ) பெண் ()

3 திருமணம் தகுதி

அ) கல்யாணம் ஆனவர் ()

ஆ) கல்யாணம் ஆகாதவர் ()

இ) விவாகரத்து (அ) பிரிந்து இருப்பவர் ()

4 நோயின் கால அளவு

அ) ஒரு வருடத்திற்கு கீழ் ()

ஆ) ஒரு வருடத்திற்கு மேல் ()

5 இரத்த சுத்தகரிப்பின் கால தன்மை

அ) 1 - 2 ஆண்டுகள் ()

ஆ) 3 - 4 ஆண்டுகள் ()

இ) 5 - 6 ஆண்டுகள் ()

- ஈ) 6 வருடத்திற்கு மேல் ()
- 6 இரத்த சுத்தகரிப்பின் வகைகள்
- அ) ஏ.வி .:பிஸ்டுலா ()
- ஆ) ஏ.வி கிராப்ட் ()
- இ) மைய நரம்பு வடிகுழாய் ()
- 7 ஒரு வாரத்திற்கான இரத்த சுத்தகரிப்பின் எண்ணிக்கை
- அ)வாரத்தில் ஒரு முறை ()
- ஆ))வாரத்தில் இரண்டு முறை ()
- இ)வாரத்தில் மூன்று முறை ()

பகுதி 11

பகுதி (அ) (சிறுநீரக அமைப்பு மற்றும் செயல்பாட்டிற்கான வினா – விடை)

1 சிறுநீரகத்தின் எண்ணிக்கை

- அ) 2 ()
- ஆ) 1 ()
- இ) 8 ()
- ஈ) 4 ()

2 சிறுநீரகங்கள் அமைந்துள்ள பகுதி

- அ) வயிற்று பின் பகுதி ()
- ஆ) காற்றழுத்த மானிகுழ் ()
- இ) நெஞ்சு பகுதி ()

- ஈ) இடுப்பு பகுதி ()
- 3 சிறுநீரகத்தின் அமைப்பு
- அ) பேரி அமைப்பு ()
- ஆ) அவரை விதை அமைப்பு ()
- இ) வட்டம் ()
- ஈ) சதுரம் ()
- 4 சிறுநீரகத்தின் மொத்த எடை
- அ) 140கி ()
- ஆ) 150கி ()
- இ) 110கி ()
- ஈ) 100கி ()
- 5 சிறுநீரகத்தின் செயல்பாடு
- அ) சிறுநீரகத்தை உருவாக்குதல் ()
- ஆ) உப்பு சத்தை சீர்செய்தல் ()
- இ) இரத்த அழுத்தத்தை கட்டுப்படுத்துதல் ()
- ஈ) மேற்கூறிய அனைத்தும் ()
- 4 ஒரு நாளைக்கு உருவாக்கப்படும் சிறுநீரகத்தின் அளவு
- அ) 100 மி.லி ()
- ஆ) 3000 மி.லி ()
- இ) 1.5 மி.லி ()
- ஈ) 6 லிட்டர் ()

பகுதி (ஆ) (நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான வினா விடை)

7 சிறுநீரக செயலிழப்பின் வகைகள்

அ)1 ()

ஆ)2 ()

இ)4 ()

ஈ)3 ()

8 நாள்பட்ட சிறுநீரக செயலிழப்பு என்பது.

(அ) மாற்ற முடியாத செயல்பாடு இழப்பு ()

(ஆ) சிறுநீரக நீர்கட்டி ()

(இ) சிறுநீரக வீக்கம் ()

(ஈ) சிறுநீரக கற்கள் ()

9. இவர்களில் யார் நாள்பட்ட சிறுநீரக செயலிழப்பு வர அதிக வாய்ப்பு

உள்ளவர்கள்

(அ) நீரிழவு நோய் ()

(ஆ) முதியோர் ()

(இ) உயர் இரத்த அழுத்தம் ()

(ஈ) மேற்கூறிய அனைத்தும் ()

10. நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான காரணங்கள்?

அ) உடல் பருமன் ()

ஆ) அடிக்கடி நோய் தொற்றுதல் ()

இ) சிறுநீரக வீக்கம் ()

ஈ) இரத்த சோகை ()

11. இவற்றில் ஒன்று நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான அறிகுறிகள்?

- அ) அடிக்கடி சிறுநீர் கழித்தல் ()
- ஆ) அதிகப்படியான தாகம் ()
- இ) குறை இரத்த அழுத்தம் ()
- ஈ) கணுகால் வீக்கம் ()

12. நாள்பட்ட சிறுநீரக செயலிழப்பின் பரிசோதனை?

- அ) கல்லீரல் பரிசோதனை ()
- ஆ) ஹார்மோன் பரிசோதனை ()
- இ) சிறுநீரக பரிசோதனை ()
- ஈ) மேற்கூறிய எதுவும் இல்லை ()

13. நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான மிக முக்கியமான சிகிச்சை முறை

- அ) உடற்பயிற்சி மற்றும் உணவுகட்டுப்பாடு ()
- ஆ) மருத்துவம் மற்றும் உடற்பயிற்சி ()
- இ) இரத்த சுத்திகரிப்பு மற்றும் உணவு கட்டுப்பாடு ()
- ஈ) மருத்துவம் மற்றும் இரத்த சுத்திகரிப்பு. ()

பகுதி-(இ) இரத்த சுத்திகரிப்பு நோயாளிகளுக்கான வீட்டு பராமரிப்பு முறை பற்றிய வினா-விடை:-

14. சோர்விற்கான காரணம்

- அ) உப்புசத்தின் அளவு குறைவாக இருத்தல் ()
- ஆ) தசை சோர்வு ()
- இ) கார்னிடின் குறைபாடு ()
- ஈ) இரத்த சுத்திகரிப்பின் மூலம் அதிக அளவு நீர் வெளியேற்றம். ()

15. சோர்விற்கான சிகிச்சை முறை:

அ) உகந்த உணவு பழக்க முறை ()

ஆ) மசாஜ் ()

இ) உகந்த நீர்பருகுதல் ()

ஈ) தளர்வு சிகிச்சை ()

16. தசைப்பிடிப்பு என்பது

அ) தசைகளில் விரும்பதாக உணர்வு ()

ஆ) தசைகளின் சுருக்கம் ()

இ) தசை வலி ()

ஈ) தசைகளின் வீக்கம் ()

17. தசைப்பிடிப்பிற்கான சிகிச்சை முறை

அ) பாதிக்கப்பட்ட இடத்தை தேய்த்துவிடுதல் ()

ஆ) சுடுதண்ணீர் ஒத்தரம் கொடுத்தல் ()

இ) உடற்பயிற்சி ()

ஈ) மேற்கண்ட அனைத்தும் ()

18. இரத்த சோகையின் காரணம்

அ) இரும்பு சார்ந்த உணவு குறைவாக எடுத்தல் ()

ஆ) வைட்டமின் - பி - குறைபாடு ()

இ) அதிகப்படியான பாஸ்பரஸ் உடலில் இருத்தல் ()

ஈ) கால்சியம் குறைபாடு ()

19. இரத்த சோகைக்கான முதல் நிலை மருத்துவ சிகிச்சை

அ) இரத்த சிவப்பணு உட்செழுத்துதல் ()

ஆ) இரும்புச்சத்து மாத்திரைகள் ()

- இ) எரித்ரோபாய்டின் உட்செலுத்துதல் ()
- ஈ) வைட்டமின் பி12 மற்றும் போலிக் ஆசிட் மாத்திரைகள். ()
- 20 தற்காலிக இரத்த சுத்தகரிப்பின் வகைகள்?
- அ) தமனி சிரை இணைப்பு ()
- ஆ) தமனி சிரை இணைப்பு(கிராப்ட்) ()
- இ) மைய நரம்பு வடிபுழாய் ()
- ஈ) இவற்றில் எதுவும் இல்லை ()
- 21 இரத்த சுத்தகரிப்பு நோயாளிகள் இவற்றுள் ஒன்றை குறைவாக உட்கொள்ள வேண்டும்
- அ) புரதம் ()
- ஆ) பொட்டாசியம் ()
- இ) கொழுப்பு ()
- ஈ) கார்போஹைட்ரேட் ()
- 22 ஒரு நாளுக்கு பாஸ்பரஸ் எடுத்துக்கொள்ளப்படும் அளவு
- அ) 2 – 3 மி.க/ நாள் ()
- ஆ) 100 மி.கி / நாள் ()
- இ) 17 மி .கி/நாள் ()
- ஈ) 1.4 மி.கி / நாள் ()
- 23 பொட்டாசியத்தின் செயல்பாடுகள் யாவை?
- அ) உடலின் மற்றும் திசுகளின் நீரிரை சமப்படுத்துதல் ()
- ஆ) எழும்புகளில் பலம் ()

- இ) இரத்த அழுத்தம் சீர்படுத்துதல் ()
- ஈ) புண் ஆற வைத்தல் ()
- 24 பொட்டாசியம் அதிக உள்ள உணவு
- அ) தானியங்கள் ()
- ஆ) வாழைபழம் ()
- இ) புரோகோலி ()
- ஈ) ஆப்பிள் ()
- 25 ஒரு நாளுக்கு புரதம் எடுத்து கொள்ளப்படும் அளவு
- அ) 18 மி.கி ()
- ஆ) 1.6 – 1.8 மி.கி ()
- இ) 1.1 – 1.4 மி.கி ()
- ஈ) 2.3 மி.கி ()
- 26 புரதம் அதிகம் நிறைந்தள்ள உணவு?
- அ) முட்டையின் வெள்ளை கரு ()
- ஆ) உருளைகிழங்கு ()
- இ) பாதாம் ()
- ஈ) பால் பொருட்கள் ()
- 27 நல்ல கொழுப்பின் செயல்பாடுகள்?
- அ) உடலுக்கு ஆற்றல் ()
- ஆ) இருதய பாதுகாப்பு ()
- இ) கொழுப்பு சத்தினை குறைக்கும் ()

- ஈ) கால்சியத்தின் சரியான முறையில் இருத்தல் ()
- 28 சிறுநீரக திரவமாக்குதல் இவற்றின் மூலம் நடைபெறும்?
- அ) ஆப்பிள் ()
- ஆ)ஸ்ராபெரி ()
- இ)பூண்டு ()
- ஈ)வெங்காயம் ()
- 29 கேரட்டின் பயன்பாடுகள்?
- அ) தசைபிடிக்கினை குறைத்தல் ()
- ஆ)குறைந்த இரத்த அழுத்தம் ()
- இ)வாந்தியை தடுத்தல் ()
- ஈ)இரத்தத்தில் உள்ள கிருமிகளை ∴.நச்சுகளை நீக்குதல் ()
- 30 சிறுநீரக மாற்று அறுவை சிகிச்சையின் மூலம் முதல் பயன்பாடு?
- அ)அதிக படியான ஆற்றல் ()
- ஆ)ஆயுட்காலம் நீடிப்பு ()
- இ)இரத்த சுத்தகரிப்பின் இருந்து விடுதலை ()
- ஈ) குறைந்த உணவு கட்டுபாடு ()

ANSWER KEY

Answers for the Above Semi Structured Questionnaire

QUESTION NO	KEY ANSWER
1	A
2	B
3	B
4	B
5	D
6	C
7	B
8	A
9	C
10	D
11	C
12	C
13	C
14	A
15	B
16	D
17	A
18	C
19	A
20	C
21	B
22	C
23	A
24	B
25	C
26	A
27	B
28	C
29	D
30	B

*SELF INSTRUCTIONAL MODULE ON
KNOWLEDGE REGARDING POST
DIALYSIS HOME CARE AMONG CARE
GIVERS OF CHRONIC RENAL FAILURE
PATIENTS UNDERGOING
HAEMODIALYSIS*

APPENDIX-II

Teaching module on post dialysis home care among care givers of the chronic renal failure patients undergoing haemodialysis

General objectives :

At the end of the teaching programme, the care givers will be acquire adequate knowledge on post dialysis home care of hemodialysis patients and will be able to apply the healthy regimen in their daily living.

Specific objectives :

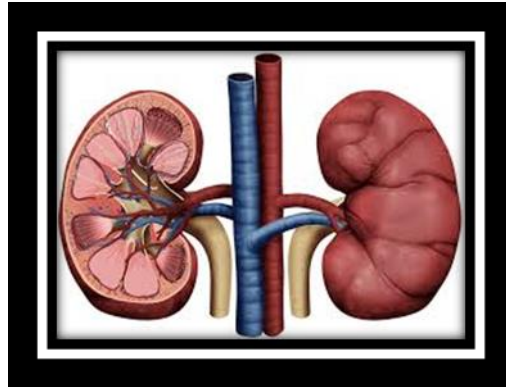
At the end of the teaching programme participants will be able to :

- explain the anatomy and physiology of kidney
- what is meant by acute renal failure and chronic renal failure
- enumerate the risk factors of chronic renal failure
- list down the causes and signs and symptoms of chronic renal failure
- explain the management of chronic renal failure
- describe the post dialysis home care among care givers of chronic renal failure undergoing haemodialysis.

INTRODUCTION:

Chronic kidney disease is a (**CKD**) condition that damage of the kidneys and decrease their ability to keep the healthy by doing the jobs listed. Kidney disease gets wastes can build to high levels in blood and make feel sick. It may develop complications like high blood nutritional health and nerve damage .Health kidneys clean from the blood and remove extra fluid in the form of urine by the process of haemodialysis .Haemodialysis is a dialysis machine and a special filters called on **artificial kidney** on a dialyzer are used to clean the blood.

ANATOMY AND PHYSICLOGY OF THE KIDNEY:



Kidney are bean-shaped organs about 11cm long , 6cm wide,3cm thick and weight 150g .its lies on the posteriors abdominal wall .one on each side of the vertebral column behind the peritoneum and below the diaphragm. A healthy adult passes 1000 to 1500 ml per day.

Functions of kidney

- Formation of urine
- Regulate the blood pressure
- Formation of red blood cell by the process of secretion of erythropoietin.
- Maintain the minerals.
- Filtering the toxic substance from blood
- Electrolyte & water ,PH balance

RENAL FAILURE

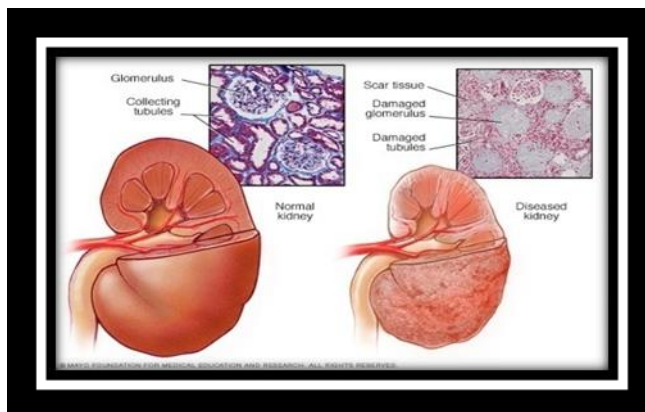
As a significant **loss of renal function in both kidneys.**

Types:

- **Acute renal failure**
- **Chronic renal failure**
- **Acute renal failure:**

A condition in which the kidneys sudden and often temporary loss of function. But, its reversible of kidney function. This condition is caused by pain medications, multiple myeloma and sepsis. The symptoms of this condition is haematuria , itchy skin , swollen of ankles ,vomiting , dyspnoea and loss of appetite.

CHRONIC RENAL FAILURE



DEFINITION:

Chronic renal failure (**CRF**) is a type of kidney disease in which there is gradual loss of kidney function over a period of months or year. Its irreverasable .

INCIDENCE:

- 150 million Indians affected per year.
- 15-17 % peoples are affected by CRF in tamil nadu

RISK FACTORS:

- Diabetes mellitus



- Hypertension



- Smoking



- Obesity



- Elderly

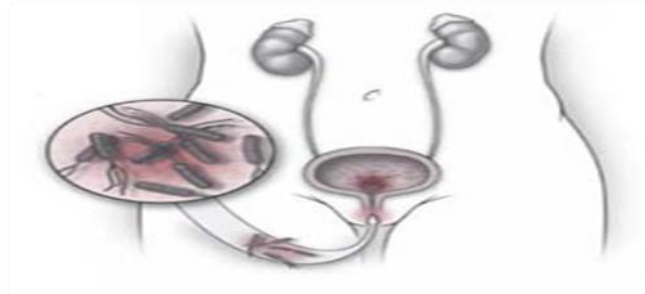


CAUSES:

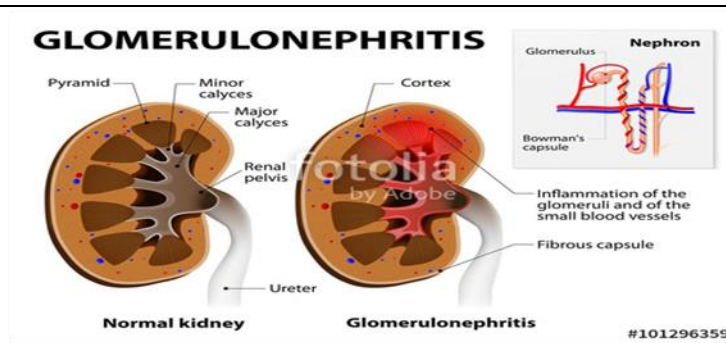
- ❖ The two main causes of chronic kidney disease are **diabetes mellitus & high blood pressure** which are responsible for up to two third of the cases.

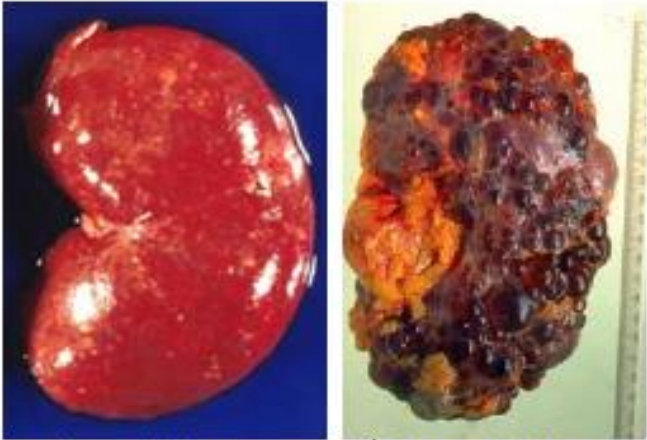
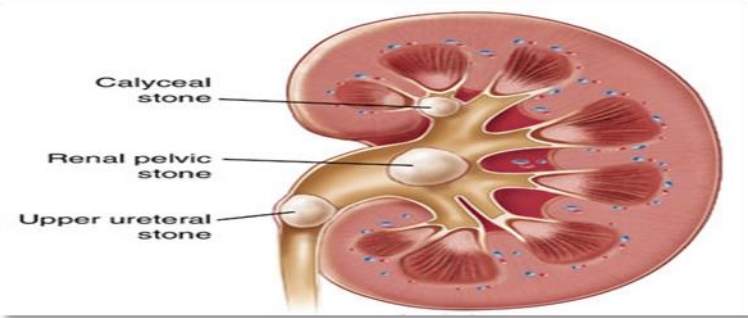


- ❖ Repeated urinary infections.











- ❖ Glomerulonephritis



<p>❖ Polycystic kidney disease</p>	 <p>The image shows two kidneys side-by-side. The kidney on the left is a normal kidney, which is smooth, bean-shaped, and reddish-brown. The kidney on the right is a polycystic kidney, which is significantly enlarged, has a bumpy, irregular surface, and is covered with numerous small, fluid-filled cysts. A ruler is visible next to the polycystic kidney for scale.</p> <p>Normal kidney Polycystic kidney</p>
<p>❖ Obstruction like kidney stones.</p>	 <p>The diagram illustrates a cross-section of a kidney with three locations where kidney stones can form: a calyceal stone in the renal calyx, a renal pelvic stone in the renal pelvis, and an upper ureteral stone in the upper part of the ureter. Labels with leader lines point to each of these stone locations.</p> <p>Calyceal stone Renal pelvic stone Upper ureteral stone</p>

CLINICAL MANIFESTATION:

<p>✓ Puffiness in face</p>	
<p>✓ Swollen in ankles</p>	
<p>✓ Vomiting</p>	
<p>✓ Poor appetite</p>	

✓ Back pain	
✓ Trouble sleeping	
✓ Feel more tired	
✓ Muscle cramps in night	

✓ Headache	
✓ Anaemia.	

MANAGEMENT:

➤ DIALYSIS

Dialysis is the treatment for renal failure that is filter the toxins , salts and purify the blood with using a machine. It helps to keep the balance between body fluids and electrolytes .

TYPES

- ✓ Haemodialysis
- ✓ Peritoneal dialysis

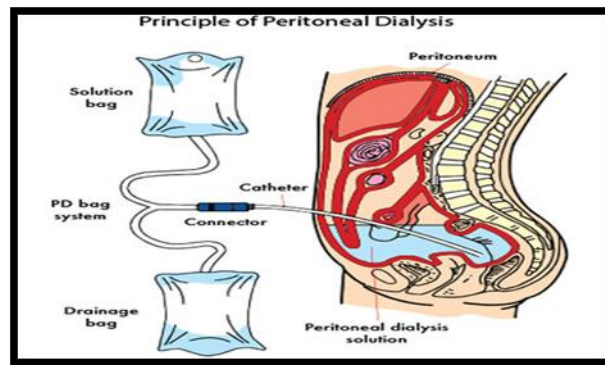
1) Haemodialysis

It's the most common type of dialysis .this process used an artificial kidney to remove waste and extra fluid from the blood . the blood is removed from the body and filtered through the artificial kidney. Its done in two or three times per week.



2) peritoneal dialysis

Implant the catheter in to the abdomen. It helps to filter the blood through the peritoneum , a membrane in abdomen . its done in four or five times per day.



POST DIALYSIS HOME CARE OF HAEMODIALYSIS PATIENTS

A huge challenges arise when complications occur due to unsatisfactory care to these haemodialysis patients.

- ❖ HEALTH PROBLEMS DUE TO HAEMODIALYSIS & THEIR CAUSES,SIGNS AND SYMPTOMS AND MANAGEMENT
- ❖ CARE OF VASCULAR ACCESS SITE
- ❖ DIETARY MANAGEMENT FOR HAEMODIALYSIS PATIENTS

HEALTH PROBLEMS DUE TO HAEMODIALYSIS :

PHYSIOLOGICAL ISSUES :

- Fatigue
- Low blood pressure
- Pulmonary edema
- Muscle cramps
- Itchy skin
- Nausea & vomiting
- Difficulty sleep
- Joints pain
- Dry mouth
- Anaemia
- Seizure
- Head ache

▪ PSYCHIATRIC ISSUES :

- Anxiety and Depression
- Delirium

1. FATIGUE

CAUSES : Lack of nutrients

SIGNS AND SYMPTOMS



Chronic tiredness



Aching muscle



Dizziness

MANAGEMENT:

Optimum nutritional status for restore the energy level and Low to moderate aerobic exercise like Walking etc.,



2. LOW BLOOD PRESSURE

CAUSES : Too much of fluid is removed during dialysis

SIGNS & SYMPTOMS:



Blurred vision



Fainting



Low blood pressure <90

MANAGEMENT:

- To take of Blood Pressure maintenance medicine as per doctors order.
- FLUID INTAKE according to individual health conditions



3. PULMONARY EDEMA :

CAUSES : excessive salt and fluid intake

SIGNS AND SYMPTOMS:



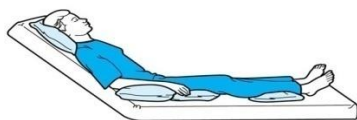
- Shortness of breath
- palpitation
- Swollen in feet

Management:

- Intake Diuretics and morphines pills for decrease the edema and shortness of breath.



- To provide fowler position with comfortable devices.



4. MUSCLE CRAMPS :

CAUSES: Low concentration of Carnitine deficiency

SIGNS & SYMPTOMS:

- Muscle pain and Discomfort



MANAGEMENT:

- Stretching exercise



- Hot pack application for to help to increase circulation



- Administer carnitine pills prevent muscle cramps



- Rubbing on affected area



5. ITCHY SKIN

CAUSES: Excessive phosphorus in the body

SIGNS & SYMPTOMS:

- Redness & Dry ,cracked skin



MANAGEMENT :

- Phosphate- binder prescribe.



- Recommended moisturized cream to sooth & moisture the skin.



6. NAUSEA & VOMITTING

CAUSES: Creatinine level increase in serum.

SIGNS & SYMPTOMS:



Vertigo



Rapid pulse

MANAGEMENT:

- Anti emetic drugs help to reduce this symptoms.
- Restricted salt food items



7. DIFFICULTY FALLING SLEEP

CAUSES:

- Unpleasant sensation in cuff muscles

SIGNS & SYMPTOMS;

Prickly sensation in muscles



Day time sleep

MANAGEMENT :

Massage



Warm bath



Relaxation therapy

8. JOINT PAIN

CAUSES: fail to maintain the proper level of calcium in bone

SIGNS & SYMPTOMS:

Swelling of joint



Stiffness

MANAGEMENT :

- Exercise may help to reduce stiffness



- Proper intake of calcium rich diets



9. DRY MOUTH

CAUSES:

- Restricted fluid intake



SIGNS AND SYMPTOMS:



sore in the mouth



dry tongue

MANAGEMENT:

- performing oral hygiene at least 4 times ,after each meal & before sleep.

**10. ANAEMIA****CAUSES:**

- Insufficient erythropoietin production
- Low level of nutrient found in foods of iron , vitamin- B 12, folic acid

SIGNS AND SYMPTOMS:

Paleness



Shortness of breath



Weakness

MANAGEMENT:

- Iron pills & iron rich foods may help to improve iron & HB Levels
- Erythropoietin is one of the best treatment for the patient with anemia.



11. SEIZURE

CAUSES: fluid and electrolytes imbalance

SIGNS & SYMPTOMS:

- **Whole** body fainting



- Rhythmic muscle contractions.



MANAGEMENT: Administer anti-convulsant drugs.



12. HEADACHE

CAUSES: large amount of electrolyte shift.

SIGNS AND SYMPTOMS:

- bi-frontal discomfort.



MANAGEMENT: Administer codeine (Tylenol).



PSYCHIATRIC ISSUES DUE TO HAEMODIALYSIS

1. ANXIETY & DEPRESSION

CAUSES: loss of kidney function

SIGNS & SYMPTOMS:



nervousness



sweating

MANAGEMENT:

- **Relaxation therapy**



- **Limiting caffeine & avoid tobacco**



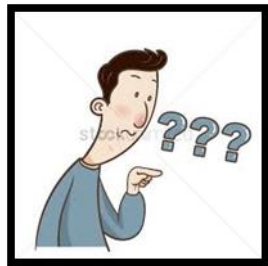
- **Beta –blockers & benzodiazepines** may also used for episodic anxiety & **Anti-depressant** drugs



2. DELIRIUM:

CAUSES: Electrolyte imbalance

SIGNS AND SYMPTOMS:



Disoriented



Irritability

MANAGEMENT:

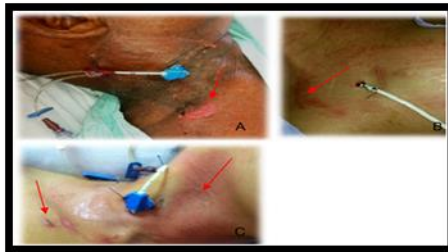
- ✓ Promote good sleep in calm environment .

**II -CARE OF VASCULAR ACCESS SITE****❖ CENTRAL VENOUS CATHETER :****DO`S**

- Keep the central line clean and dry.



- Watch any signs of redness, leaks ,cracks or other damages.

**DON`TS**

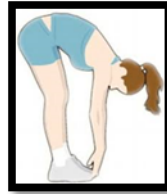
- Don't submerge the central line site or cap below the level of water like swimming,



- Never use any sharp articles near the catheter like scissor, razors , knife.



- Avoid lowering your chest below your waist. It helps to prevent the catheter internal tips could slip out of place in the vein.



❖ **AV-FISTULA: DO'S**

- Use the assess arm for dialysis only.



- Strengthening exercise should be done after incision has healed. It help to promote circulation.



- To check the functioning of the vascular access (thrill sound)in three times per day.



- To monitor of redness, swelling, pain around the fistula area.



DON'T

- Don't sleep on fistula arm.



- Don't carry any heavy objects.



- Don't wear a watch bracelet ,purse ,bag or tight cloths over on fistula.



- Avoid anyone using the extremity to obtain blood pressure or perform vein puncture.



III-DIETARY MANAGEMENT FOR HAEMODIALYSIS PATIENTS

When chronic kidney disease (CKD) progress on the dialysis diet continue to play a vital role in patients rehabilitative care. A well-balanced diet is necessary for them to stay fit as their kidneys are no longer function at its full capacity.

- ❖ Food should be Limited
 - ✓ Potassium
 - ✓ Phosphorus
 - ✓ Sodium
 - ✓ Fluids
- ❖ Food should be taken in large quantity :
 - ✓ Protein
 - ✓ Carbohydrate
 - ✓ Calcium
 - ✓ Iron

A) PHOSPHORUS :

- Phosphorus is a mineral that makes up of persons total body weight. It's a second most abundant mineral in the body.
- Function of the phosphorous is growth & repair of the cells & tissues. It together with calcium provide structure & strength of the bones & teeths.
- **Dietary recommended of phosphorus is 1000 mg / days**

Limited of high phosphorus food such as :



lima beans



black beans



dark & whole grains bread



chocolate

NOTE : Do not forget to take phosphate –binder with meals .

Phosphate –binder are medications that help to lower level of phosphorus in body.
phosphate -binder should be taken just before first bite of food.

B) POTTASSIUM :

- Potassium is an essential minerals micronutrient & is the main intra cellular ions for all types of cells.
- Function of the potassium is maintain fluid & electrolytes balance in the bodies of humans .it play also building of muscles.
- **Dietary recommended of potassium is limited to 2000 mg of potassium /day.**

Avoid high potassium foods:



Bananas



Orange juice



Potato



Tomatoes

Specially prepared potatoes:

1. Peel & slice into 1/8 inch pieces.
2. Soak 1 cup potatoes in 5 cups of water for 2 hours.
3. Drain & rinse & drain.

4. Cook in a large amount of water.
5. Drain & mash, fry or serve plain.

C) SODIUM :

- Sodium is a minerals that is essential nutrients in our body
- Function of sodium is to keep the right balance of fluids & it also function in nerves & muscle activities.
- **Dietary recommended of sodium is 2-3g/day.**

Avoid sodium rich foods :



Avoid salty snacks such as chips & pickles

FLUIDS :

- In the early stage of kidneys failure do not need to limit the fluids you drink . when you are on dialysis you need to watch the amount of liquids you take in.
- Too much of fluid will lead to shortness of breath, swelling ,and heart failure.
- Measure your fluids and drinks small cups to help you keep track of how much you have had to drink.
- Limit sodium to help cut down on thirst



- To help quench your thirst ,you might try to:
- ✓ Rinse your mouth &Suck on a piece of ice cubes.

PROTEIN :

- Protein is important to aid in growth & maintenance of body tissues .
- Function of protein is sources of energy , transport of oxygen & immunity sources.
- **Dietary recommended of protein is 7-8 ounce /day (1.1-1.4 g/kg)**

PROTEIN RICH CONTAIN FOODS :



(chest)



Sea foods



Egg white

Cereals



Poultry

E) CALCIUM :

- Calcium is the most abundant mineral in the body. It help to structure of the bones and teeth and prevent from bone weak and break
- **Dietary Recommended of calcium is 8.4 – 10.2 mg / day.**

CALCIUM RICH DIET:



Raw milks



Sardines



Yogurt



Almonds

CARBOHYDRATES :

- Its gives energy for the tissues, cells, & organ. Carbohydrates is important for brain function.
- **Dietary recommended for carbohydrate is 30-35 kcal /kg.**
- Note : If you have diabetes mellitus limited carbohydrates should be taken.

Carbohydrates rich food items

Brown



Oats

rice



Mango



Sweet potato



IRON :

- IRON is part of haemoglobin it help to produce the red blood cells.a protein which carries oxygen from lungs through out the bodies
- **Recommended Dietary allowance for iron is 18 mg /day.**

Iron rich diet :



Liver



Pineapple



Dried fruits



Peanut

10 GOLDEN THINGS ARE TO PROTECT THE KIDNEYS:

1. GARLIC

It is also thought to play a role in reducing renal reperfusion injury.



2. CAPSICUM :

Capsicum are high in vitamins, which help to neutralize the free radicals responsible for damaging tissue and cells, naturally building a good immune system.



3. STRAWBERRIES :

It contains of vitamins ,antioxidants ,and fiber.

They protect the heart as well as anti –cancer.



4. BAMBOO SHOOTS :

Bamboo shoots can help lower high blood sugar and cholesterol, especially for those with chronic kidney disease.



5. FIGS :

Figs are low in sodium , so they are act as a perfect defence against hypertension



6. APPLES :

Apples are not just good for your kidneys ,but can also reduce the over all ill –effects of kidney disease .It can help to lower cholesterol & sugar.



7. GINGER:

Its considered an excellent herb for improving kidney function. Ginger can work to relive clots, stimulate the circulatory system, promote the blood flow to the kidneys and clean the blood as well as improve the quality of life.



8. ONIONS:

Onion brings immense health benefits specially to people who have a high creatinine levels along with reduce kidney function.

It help to reduces blood viscosity & to help to lower high blood pressure, thereby reducing the progressive of kidney disease.



9. CARROTS :

BETA-CAROTENE, the water soluble forms of vitamin A in carrots, help the kidneys filter toxins out of the blood & prevent urinary tract infections.

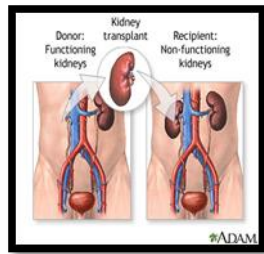


OMEGA -3 FATTY ACIDS:

It help to decrease blood pressure, risk of abnormal heart beats, decrease triglyceride levels.



TRANSPLANT WORK UP FOR HAEMODIALYSIS PATIENT



INTRODUCTION :

Renal transplant is the treatment of choice for a minority of patients with end stage renal disease .In the united states kidney transplants have been performed and patients were alive with a functioning transplants kidneys. **Currently** more than 101,000 ,patients all waiting for the kidney transplant .kidney transplant in india can be done in many cites.

DEFINITION :

A kidney transplant is the transfer of a healthy kidney from one person into the body of a person who has little or no kidney functions.

TYPES OF TRANSPLANT :

1. LIVING DONOR TRANSPLANT ;

Receiving a living donor kidney transplant is preferable to a deceased donor transplant .this is because living donor kidneys last longers & provide better patients survival then decreased donor kidneys.

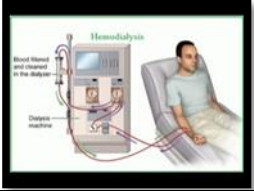












2. DECEASED DONOR TRANSPLANT ;

When individuals die (**cadaveir**),donation of a deceased love ones healthy organs gives recipients the opportunity to continue living long & full lives.

PROGNOSIS :

Kidney transplantation is a life-extending procedure .The typical patient will routinely live at -least **12-20 years longer**.

DO'S AND DON'T FOR HAEMODIALYSIS PATIENT

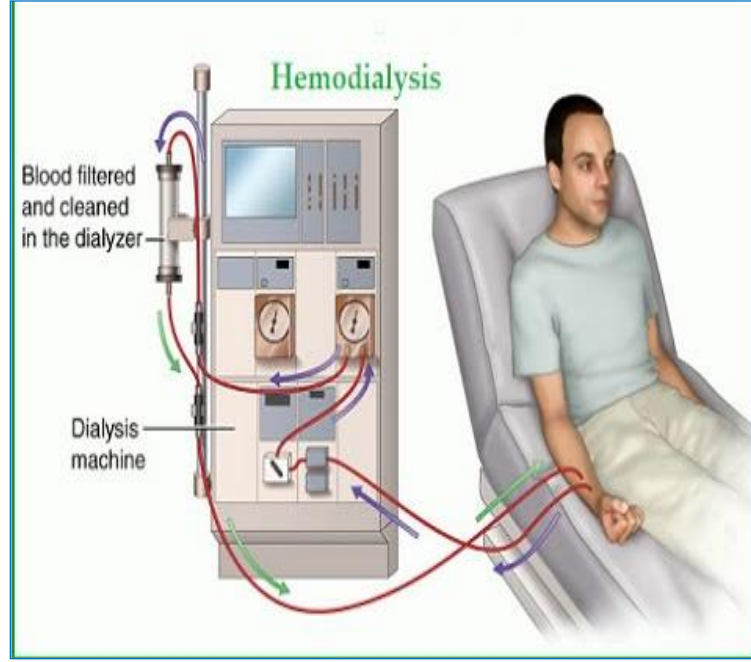
DO'S	DON'T
<p>✓ Regular haemodialysis as directed by the doctor.</p> 	<p>Avoid skipping the dialysis</p> 
<p>✓ Take high protein ,irons, calcium foods.</p> 	<p>Avoid high potassium and phosphorus rich diet.</p> 
<p>✓ To limit the consumption of fluids.</p> 	<p>Avoid excess of fluids.</p> 
<p>✓ Maintain the ideal body weight & monitor the body weight.</p> 	<p>Don't ignore the body weight.</p> 
<p>✓ Monitor regular investigations.</p> 	<p>Don't skipping the monitor of investigation</p> 
<p>✓ Regular take of vaccination and injection. Erythropoietin</p>  	<p>Don't forget to take of vaccination & injection. erythropoietin</p> 

CONCLUSION :

Chronic renal failure is one of the major trouble in developing country & haemodialysis is mostly preferable treatment for chronic renal failure. we saw above content of post dialysis home care of haemodialysis patients.,it not only reduce the physical issues of haemodialysis ,it help to improve the quality of life in those kind of peoples.



தீர்த்த சுத்திகரிப்பு தோயாளிகளுக்கான வீட்டுப் பராமரிப்பு வழிமுறைகள்



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RASS Academy College of Nursing,

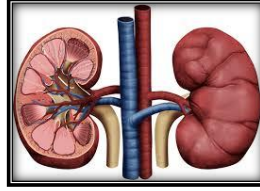
Poovanthi.

இரத்த சுத்திகரிப்பு நோயாளிகளுக்கான வீட்டுப் பராமரிப்பு வழிமுறைகள்

முன்னுரை

நாள்பட்ட சிறுநீரக நோயானது இரண்டு சிறுநீரகமும் தனது வேலையை செய்யாமல் பழுதடைந்த நிலையில் இருப்பது ஆகும். இதனால் நமது உடலில் உள்ள கழிவுகள் உடலைவிட்டு வெளியேறாமல் இரத்தத்தில் படிந்து பல விதமான சிக்கல்களை உண்டு பண்ணுகின்றது. டயாலிசிஸ் மூலம் இரத்தத்தில் உள்ள கழிவுகள் வெளியேற்றப்படுகிறது.

சிறுநீரகத்தின் அமைப்பு மற்றும் செயல்பாடு



சிறுநீரகத்தின் அமைப்பு

சிறுநீரகங்கள் அவரை விதை வடிவில் இருக்கும். இதன் நீளம் 11 செ.மீ, அகலம் 6 செ.மீ, தடிமன் 3 செ.மீ மற்றும் 150 கி எடை கொண்டதாக இருக்கும். சிறுநீரகங்கள் வயிற்றின் பின்புறம், முதுகு தண்டுவடத்திற்கு இருபுறமும் மற்றும் உதரவிதானத்திற்கு கீழேயும் அமைந்துள்ளது. ஒரு ஆரோக்கியமான சிறுநீரகங்கள் ஒரு நாளைக்கு 1000-1500 மி.லி வரையில் சிறுநீரை வெளியேற்றும்.

சிறுநீரகத்தின் வேலைகள்

- சிறுநீர் உருவாக்குதல்
- இரத்த அழுத்தத்தை கட்டுப்படுத்துதல்.
- எரித்தோ பாய்டின் என்னும் ஹார்மோன் சுரக்கப்பட்டு அவற்றின் மூலம் இரத்த சிவப்பு அணுக்களை உருவாக்குதல்.
- இரத்தத்தில் இருந்து கனிமங்களை கட்டுப்படுத்துதல்
- இரத்தத்தில் இருந்து நச்சுப்பொருட்களை வெளியேற்றுதல்
- ஒட்டுமொத்த உடலின் நீர் சமநிலை பராமரித்தல்.

சிறுநீரக செயலிழப்பு

சிறுநீரகங்கள் தனது சீரான பணியை செய்ய முடியாமல் செயலிழந்த நிலையில் இருப்பதை சிறுநீரக செயலிழப்பாகும். இவை இரண்டு வகைப்படும்.

வகைகள்

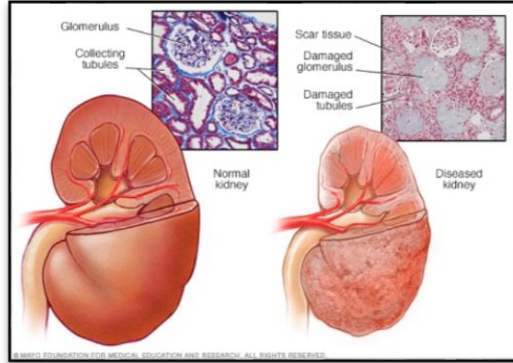
- தற்காலிகமான சிறுநீரக செயலிழப்பு
- நாளப்பட்ட சிறுநீரக செயலிழப்பு

தற்காலிகமான சிறுநீரக செயலிழப்பு

சிறுநீரகங்கள், இரத்தத்தில் உள்ள கழிவுப் பொருட்களை வடிக்கட்ட முடியாமல் போவதால் தற்காலிகமான சிறுநீரக செயலிழப்பு ஏற்படுகிறது. அதிகப்படியான வலி நிவாரணிகளை உட்கொள்ளுதல், புற்றுநோய் மற்றும் சிறுநீர் சீழ்பிடிப்பினால் தற்காலிக சிறுநீரக செயலிழப்பு உருவாகிறது. இவ்வகையான சிறுநீரக செயலிழப்பு உள்ளவர்களுக்கு இரத்தம் கலந்த சிறுநீர், கணுக்கால்களில் வீக்கம், பலவீனம், மூச்சுத் திணறல், வாந்தி, தோல்களில் அரிப்பு மற்றும் பசியின்மை ஆகிய அறிகுறிகள் காணப்படும். இவ்வகையான சிறுநீரக செயலிழப்பு மருத்துவ சிகிச்சையினால் தனது செயல்களை திரும்ப செய்ய இயலும்.

நாளப்பட்ட சிறுநீரக செயலிழப்பு

சிறுநீரகங்கள் படிப்படியாக பல மாதங்கள் அல்லது வருடங்கள் தனது செயல்களை செய்ய இயலாமல் போவதே நாளப்பட்ட சிறுநீரக செயலிழப்பாகும். இவ்வகை சிறுநீரக செயலிழப்பில் சிறுநீரகங்கள் தனது ஆரோக்கியமான நிலைக்கு திரும்ப இயலாது.



நிகழ்வு

- இந்தியாவில் ஒரு ஆண்டுக்கு 150 மில்லியன் மக்கள் நாளப்பட்ட சிறுநீரக செயலிழப்பால் பாதிப்படைகின்றனர்.
- அதில், தமிழ்நாட்டில் 15 – 17% மக்கள் நாளப்பட்ட சிறுநீரக செயலிழப்பால் பாதிக்கப்படுகின்றனர்.

நாள்பட்ட சிறுநீரக செயலிழிப்பு வர அதிக வாய்ப்பில் உள்ளவர்கள்

<p>நீரிழிவு நோய்</p>	
<p>உயர் இரத்த அழுத்தம்</p>	
<p>புகை பிடித்தல்</p>	
<p>உடல்பருமன்</p>	
<p>முதியோர் (60-வயது)</p>	

நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான காரணங்கள்

<p>நீரிழிவு நோய் மற்றும் உயர் இரத்த அழுத்தம் இவை இரண்டும் சிறுநீரக செயலிழப்பிற்கு முதன்மை காரணமாக நிகழ்கின்றது.</p>	
<p>சிறுநீரக தொற்று நோய்</p>	
<p>சிறுநீரக வடிகட்டிகளின் வீக்கம்</p>	
<p>சிறுநீரக நீர்கட்டிகள்</p>	
<p>சிறுநீரக கற்கள்</p>	

நாள்பட்ட சிறுநீரக செயலிழப்பிற்கான அறிகுறிகள்

முக அதைப்பு	
கணுக்கால் வீக்கம்	
வாந்தி	
பசியின்மை	
முதுகு வலி	
தூக்கமின்மை	
அதிகப்படியான சோர்வு	

தசைப்பிடிப்பு	
தலைவலி	
இரத்த சோகை	

சிகிச்சை முறை:

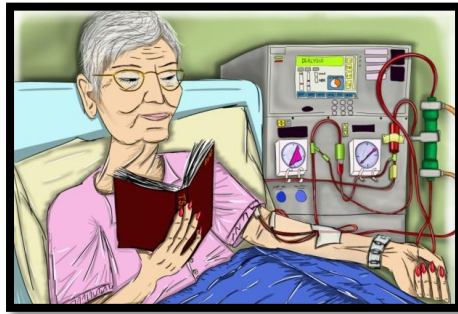
சுத்திகரிப்பு:

சுத்திகரிப்பு என்பது இரத்தத்தில் இருந்து கிரியாட்டினின் மற்றும் யூரியா கழிவுகளையும், கூடுதல் நீரையும் பிரித்தெடுக்கும் ஓர் செயல்பாடாகும்.

வகைகள்:

- இரத்த சுத்திகரிப்பு (ஹீமோடயலிசிஸ்)
- வயிற்று உள்ளுறை சுத்திகரிப்பு (பெரிபோனிமல் டயாலிசிஸ்)

இரத்த சுத்திகரிப்பு (ஹீமோ டயாலிசிஸ்)

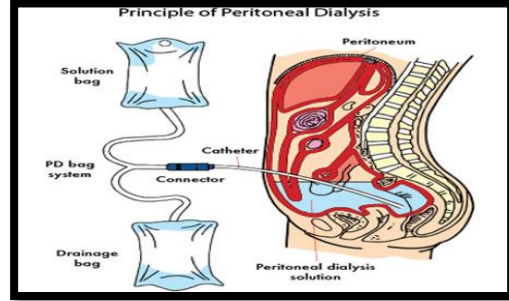


இவ்வகையான சுத்திகரிப்பில் ஒருவரின் உடலிருந்து இரத்தத்தை எடுத்து செயற்கை சிறுநீரக (டயலைசர்) மூலமாக சுத்திகரித்து மறுபடியும் உடலுனுள் இரத்தத்தை உட்செலுத்துதலே இரத்த சுத்திகரிப்பு என அழைக்கப்படும். இவை

நோயாளியின் உடல் நிலையினை பொருத்து வாரத்திற்கு மூன்று அல்லது இரண்டு முறை செய்யப்படுகிறது.

2.வயிற்று உள்ளுறை சுத்திகரிப்பு (பெரிடோனிமல் டயாலிசிஸ்)

வயிற்றின் அடிப்பகுதியில் ஒரு மெல்லிய வடிகுழாய் மூலம் இரத்தில் உள்ள கழிவுகளை வயிற்று பகுதியில் இருந்து பிரித்தெடுப்பதே வயிற்று உள்ளுறை சுத்திகரிப்பு எனப்படும்.



இரத்த சுத்திகரிப்பு நோயாளிகளுக்கான வீட்டு பராமரிப்பு வழி முறைகள்

- இரத்த சுத்திகரிப்பினால் (ஹீமோடயாலிஸ்னால்) ஏற்படும் பிரச்சனைகள் மற்றும் அதன் சிகிச்சை முறைகள்
- அணுகல் பகுதி பராமரிப்பு
- இரத்த சுத்திகரிப்பு நோயாளிகளுக்கான பரிந்துரைக்கப்பட்ட உணவு முறைகள்

I. இரத்த சுத்திகரிப்பினால் (ஹீமோடயாலிஸ்னால்) ஏற்படும் பிரச்சனைகள் மற்றும் அதன் சிகிச்சை முறைகள்

இரத்த சுத்திகரிப்பை (ஹீமோடயாலிஸ்) மேற்கொள்ளும் நோயாளிகள் பலவிதமான பிரச்சனைகளை எதிர்க் கொள்கின்றனர். அவை இரு வகைப்படும்.

1. உடற் சார்ந்த பிரச்சனைகள்
2. மனம் சார்ந்த பிரச்சனைகள்

1. உடற்சார்ந்த பிரச்சனைகள்

- உடற்சோர்வு
- குறைந்த இரத்த அழுத்தம்
- தசைபிடிப்பு
- நுரையீரலில் நீர் சேர்தல்
- தோல் அரிப்பு
- குமட்டல் மற்றும் வாந்தி
- தூக்கமின்மை
- மூட்டு வலி
- இரத்தசோகை
- வலிப்பு
- தலைவலி மற்றும் பல

2. மனம் சார்ந்த பிரச்சனைகள்

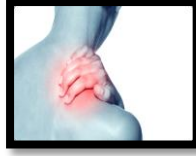
- பதற்றம் மற்றும் மன அழுத்தம்
- சித்தப்பிரமை

1. உடற்சோர்வு

காரணம் → உணவு பற்றாக்குறைவினாலும், சமச்சீற்ற உணவு

உட்கொள்ளுவதாலும் அதிகப்படியான உடற்சோர்வு ஏற்படுகிறது.

அறிகுறிகள்:



உடற்சோர்வு

தசைவலி

தலைச்சுற்றல்

சிகிச்சை

- சரியான முறையில் சத்தான உணவை எடுத்துக் கொள்ள வேண்டும்.
- உடற்பயிற்சியினால் தசைகள் வலுப்பெற்று புத்துணர்ச்சி ஏற்படும். எ.கா: நடைபயிற்சி



2. குறைந்த இரத்த அழுத்தம்

காரணம்: இரத்த சுத்திகரிப்பினால் உடலில் உள்ள அதிகபடியான நீர்ச்சத்து வெளியேற்றப்படுகிறது.

அறிகுறிகள்



மங்கலான பார்வை

மயக்கம்

குறை இரத்த அழுத்தம்

<90 / 80மி.கி / டெ.லி

சிகிச்சை

- இரத்த அழுத்தத்தை சரிசெய்ய மருத்துவர் ஆலோசிக்கப்பட்ட மருந்துகளை உட்கொள்ளுதல் வேண்டும்.
- மருத்துவர் பரிந்துரைக்கப்பட்ட நீரின் அளவையே பருக வேண்டும்.



3. தசை பிடிப்பு (கெண்டக்கால் சதை)

காரணம்: உடலில் உள்ள கார்னிடின் என்னும் கனிம பொருட்களின் குறைபாடால் தசைப்பிடிப்பு ஏற்படுகிறது.

அறிகுறிகள்:

தசைகளில் வலி மற்றும் சோர்வு



சிகிச்சை

- தசைவிரிவாக்க உடற்பயிற்சி மேற்கொள்ளுதல்.



- தசைப்பிடிப்பு உள்ள இடத்தில் சுடுதண்ணீர் வைத்து ஒத்திரம் கொடுப்பதன் மூலமாக இரத்த ஓட்டத்தை அதிகரித்து தசைகளின் வலியை குறைக்கிறது.



- மருத்துவர் ஆலோசனைப் படி கார்னிடின் சார்ந்த மருந்தினை உட்கொள்ளுதல்.



- தசைபிடித்த இடத்தினை நன்கு பிடித்து விடுதல்



4. நுரையீரலில் நீர் சேர்தல்:

காரணம்: அதிக அளவு நீர் அருந்துவதாலும், உப்பு கலந்த பொருட்களை உட்கொள்ளுவதாலும் நுரையீரலில் நீர் சேர்க்கப்படுகிறது.

அறிகுறிகள்:



மூச்சுதிணறல்



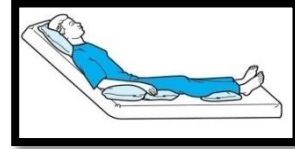
படபடப்பு



கால்களில் வீக்கம்

சிகிச்சை:

- சிறுநீர் பெருக்கிகளின் மூலம் நுரையீரலில் உள்ள அதிகப்படியான நீரை வெளியேற்றப்படுகிறது.
- மயக்கமருந்து (மார்பின்) மூலம் அதிகப்படியான மூச்சுதிணறலை சரிசெய்யப்படுகிறது.
- அரை நடுநிலை மூலம் நுரையீரல் பகுதி விரிவடைவதால் மூச்சுதிணறல் கட்டுப்படுத்தப்படுகிறது.



5.தோல் அரிப்பு

காரணம்: பாஸ்பரஸ் என்னும் தாது உப்புகள் உடலில் அதிகமாக காணப்படுவதால் தோல் அரிப்பு ஏற்படுகிறது.

அறிகுறிகள்

சிவந்த மற்றும் வறண்ட வெடிப்பான தோல்.



சிகிச்சை

- பாஸ்பேட்-பைண்டர் என்னும் மாத்திரையை எடுத்து கொள்ளுவதன் மூலம் உடலில் உள்ள அதிகப்படியான பாஸ்பரஸ் உட்கிரகிப்பை தடுக்கப்படுகிறது.
- ஈரபதமான கிரீம்களை தோலில் பூசவேண்டும்.



6. குமட்டல் மற்றும் வாந்தி

காரணம்

கிரியாட்டின் என்னும் உப்புசத்து உடலில் அதிகமாக இருப்பதால் குமட்டல் மற்றும் வாந்தி ஏற்படுகிறது.

அறிகுறிகள்



தலைசுற்றல்



அதிகமான நாடிதுடிப்பு

சிகிச்சை

- உப்புசார்ந்த உணவினை உட்கொள்ளுவதை தவிர்க்க வேண்டும்.
- வாந்தி தடுப்பு மாத்திரை உட்கொள்ள வேண்டும்.



7. தூக்கமின்மை

காரணம்:

தசைகளின் விரும்பத்தகாத உணர்வு

அறிகுறிகள்

- தசைகளில் முள் குத்துவது போன்ற உணர்வு ஏற்படுதல்
- பகல் நேரத்தில் தூங்குதல்



சிகிச்சை

- கெண்டதசைகளை பிடித்து விடுதல்
- வெதுவெதுப்பான சுடுநீரில் பாதங்களை வைத்தல்.
- தியான பயிற்சி செய்தல்.



8. மூட்டு வலி

காரணம்

எலும்பில் உள்ள கால்சியத்தின் அளவு குறைந்த நிலையில் இருப்பதால் மூட்டுவலி ஏற்படுகிறது.

அறிகுறிகள்



மூட்டுகளில் வீக்கம்



இறுக்கமான மூட்டு

சிகிச்சை

- கால்சியம் சார்ந்த உணவுகளை உட்கொள்ள வேண்டும்.
- உடற்பயிற்சி மேற்கொள்வதினால் மூட்டுகளில் ஏற்படும் இறுக்கம் குறையும்.

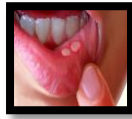


9. உலர்ந்த வாய்

காரணம்:

மருத்துவரால் பரிந்துரைக்கப்பட்ட அளவுள்ள நீரை மட்டுமே உட்கொள்ளுதல்.

அறிகுறிகள்



வாய்ப்புண்



நாவறட்சி

சிகிச்சை

உலர்ந்த வாயினை ஒரு நாளைக்கு நான்கு முறையாவது சுத்தம் செய்ய வேண்டும்.



10. இரத்த சோகை

காரணம்:

எரித்ரோபாய்டின் எனப்படும் ஹார்மோன் சரியான அளவில் சுரக்காதிருப்பதால் இரத்தசோகை ஏற்படுகிறது. இரும்புசத்து சார்ந்த உணவினை குறைவாக எடுத்துக்கொள்ளுதல்.

அறிகுறிகள்:



வெளிரிய முகம்



மூச்சுத்திணறல்



உடற்சோர்வு

சிகிச்சை:

<p>இரும்பு சத்து சார்ந்த உணவுகள் மற்றும் மருந்துகளை உட்கொள்வதால் இரத்த சிவப்பு அணுக்களின் எண்ணிக்கை அதிகரிக்க முடியும்.</p>	
<p>எரித்ரோபாய்டின் என்னும் மருந்தினை வரையறுக்கப்பட்ட நேரத்தில் எடுத்து கொள்ள வேண்டும்.</p>	

11. வலிப்பு

காரணம்:

நீர்சத்து மற்றும் தாதுஉப்புகள் குறைவாக இருப்பதால் வலிப்பு வரக்காரணமாக இருக்கிறது.

அறிகுறிகள்:



மயக்கம்



தாளதசை சுருக்கம்

சிகிச்சை

வலிப்பு தடுப்பு மருந்தினை எடுத்து கொள்ள வேண்டும்.



12. தலைவலி

காரணம்:

சமீபத்திலே நிலையில் தாது உப்புக்கள் உடம்பில் இருத்தல்.

அறிகுறிகள்

- தலையின் இருபக்க வலி



சிகிச்சை

தலைவலி நிவாரணிகளான (டைலினால்) உட்கொள்ளுதல் மூலம் தலைவலியானது குறைக்கப்படுகிறது.



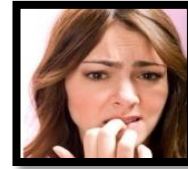
2. மனம் சார்ந்த சிக்கல்கள்

1. பதற்றம் (மற்றும்) மனஅழுத்தம்

காரணம் ; நோயின் தன்மை

அறிகுறிகள்

- பதற்றம்
- உடம்பில் அதிகமாக வியர்த்தல்



மருத்துவ சிகிச்சை

- தளர்வுநிலை பயிற்சி மேற்கொள்ள வேண்டும்.



- தேனீர் (காஃபி) பருகுவதை குறைத்து கொள்ள வேண்டும்.



- புகைப்பிடிப்பதை தவிர்க்க வேண்டும்.



- மன அழுத்தத்தை சரி செய்யும் மருந்தினை உட்கொள்ள வேண்டும்.



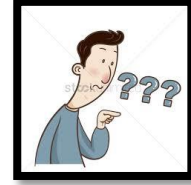
2. சித்தபிரமை:

காரணம்:

தாது உப்புக்கள் உடலில் சமசீரற்ற நிலையில் இருத்தல்.

அறிகுறிகள்

- தன்னிலை மறத்தல்



சிகிச்சை

- அமைதியான சூழ்நிலையில் ஆழ்ந்த உறக்கம் மேற்கொள்ளுதல்.



II. அணுகல் பகுதி பராமரிப்பு

1. மைய நரம்பு வடிகுழாய்:

இவை தற்காலிகமான சிகிச்சை முறையாகும்.

செய்ப்பவை	
1. மைய நரம்பு வடிகுழாயினை சுத்தமாகவும், உலர்ந்த நிலையில் வைத்திருக்க வேண்டும்.	
2. மைய நரம்பு வழி குழாயினை சுற்றியுள்ள தோல் பகுதியில் வீக்கம், சிவந்த தோல் அல்லது ஏதேனும் வெடிப்பு, நீர் மற்றும் இரத்த கசிவு இருந்தால் மருத்துவரை அணுக வேண்டும்.	



செய்ய கூடாதவை	
1. மைய நரம்பு வடிகுழாய் நீரில் மூழ்கும்மாறு குளிக்க கூடாது. எ.கா: நீச்சல் குளம்	
2. கூர்மையான பொருட்களை மைய நரம்பு வடிகுழாயின் அருகாமையில் உபயோகிக்கக்கூடாது. எ.கா: சவர கத்தி.	
3. மைய நரம்பு வடிகுழாயினை கொண்ட நோயாளிகள் தனது இடுப்பிற்கு கீழே குனியக்கூடாது.	

2. தமனி சிரை இணைப்பு

இவை நிரந்தர சிகிச்சை முறையாகும்.

செய்ப்பவை:	
1. தமனி சிரை இணைப்பு பொருத்தப்பட்ட கைகளை இரத்த சுத்திகரிப்புக்கு மட்டுமே பயன்படுத்த வேண்டும்.	
2. தமனி சிரை இணைப்பு அறுவை சிகிச்சை செய்யப்பட்ட கையில் புண் ஆறிய பிறகு தசை வழுப்பெறும் உடற்பயிற்சியினை மேற்கொள்ள வேண்டும்.	
3. தமனி சிரை இணைப்பு பகுதி சீரான நிலையில் உள்ளதா என்பதை கவனிக்க வேண்டும்.	
4. தமனி சிரை இணைப்பு பொருத்தப்பட்ட பகுதியில் காலப்போக்கில் இரத்தகசிவு, வலி, வீக்கம் இருந்தால் மருத்துவரை அணுகவும்.	

செய்யக்கூடாதவை:	
1. தமனி சிரை இணைப்பு பொருத்தப்பட்ட கைகளை தலைக்கு அடியில் வைத்து உறங்க கூடாது.	
2. தமனி சிரை இணைப்பு பொருத்தப்பட்ட கையினால் மிக கடினமான பொருட்களை தூக்கக்கூடாது.	

<p>3.தமனி சிரை இணைப்பு பொருத்தப்பட்ட கையினை சுற்றி இறுக்கமான உடை, கைகடிகாரம், காப்பு போன்றவற்றை பயன்படுத்தக் கூடாது.</p>	
<p>4.தமனி சிரை இணைப்பு பொருத்தப்பட்ட நோயாளியின் கையில் இரத்தம் எடுத்தல் மற்றும் இரத்த அழுத்தம் பார்க்கக் கூடாது.</p>	

III. இரத்த சுத்திகரிப்பு நோயாளிக்களுக்கான பரிந்துரைக்கப்பட்ட உணவு முறைகள்

இரத்த சுத்திகரிப்பில் உள்ள நோயாளிகள், பரிந்துரைக்கப்பட்ட உணவினையே எடுத்து கொள்ள வேண்டும். அவர்கள் சரியான அளவிலான புரதம், கலோரிகள், வைட்டமின், திரவ மற்றும் கனிமங்கள் எடுத்து கொள்ள வேண்டும்.

இரத்த சுத்திகரிப்பில் உள்ள நோயாளிகள் கீழ்க்கண்டவற்றை குறைவாக எடுத்து கொள்ள வேண்டும். அவைகள்,

- பொட்டாசியம்
- சோடியம்
- பாஸ்பரஸ்
- திரவ நிலையில் உள்ள ஆகாரங்கள்

மேலும், இரத்த சுத்திகரிப்பில் உள்ள நோயாளி கீழ்க்கண்டவற்றை கண்டிப்பாக எடுத்து கொள்ள வேண்டும். அவை, அவை,

- புரதம்
- மாவுசத்து
- கால்சியம்
- இரும்புசத்து

1. பாஸ்பரஸ்

- பாஸ்பரஸ் உடலில் புதிய திசுகளை உருவாக்குகிறது மற்றும் எலும்புகளிலும் பற்களிலும் நல்ல வடிவமைப்பை கொடுக்கிறது.
- பாஸ்பரஸ் பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு – 1000 மி.கி

பாஸ்பரஸ் குறைவாக எடுத்துக் கொள்ள வேண்டிய உணவு பொருட்கள்



லிமா
பீன்ஸ்



கருப்பு
பீன்ஸ்



முழு தானியங்கள்
பிரெட்



சாக்லேட்

2. பொட்டாசியம்

- பொட்டாசியம் உடலில் உள்ள தாது உப்புக்களை சமநிலையில் வைக்கிறது.
- பொட்டாசியம் பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு – 2000 மி.கி.

பொட்டாசியம் குறைவாக எடுத்துக் கொள்ள வேண்டிய உணவு பொருட்கள்



வாழைபழம்



ஆரஞ்சு
பழச்சாறு



தக்காளி



உருளை
கிழங்கு

உருளை கிழங்கை சாப்பிட விரும்புவார்கள் முதலில் அக்கிழங்கில் உள்ள பொட்டாசியத்தை நீக்க வேண்டும். அதற்கான வழிமுறைகள்:

- உருளைக்கிழங்கை சிறு சிறுதுண்டுகளாக வெட்ட வேண்டும்.
- இதனை 5-கப் தண்ணீரில் இரண்டு மணி நேரம் ஊற வைக்கவும்.
- பின்பு தண்ணீரை வடிகட்டவும்
- அதிக அளவு தண்ணீர் சேர்த்து வேகவிடவும்.
- தண்ணீரை வடிகட்டி பின்பு வருத்தோ, பிசைந்தோ சாப்பிடலாம்.

3. சோடியம்

- சோடியம் உடலின் நீரை சமநிலையில் வைக்கிறது.
- சோடியம் பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு 2-3 கி

சோடியம் குறைவாக எடுத்துக் கொள்ள வேண்டிய உணவு பொருட்கள்



அப்பளம்



ஊறுகாய்

4.திரவ நிலையில் உள்ள ஆகாரங்கள்

- டயாலிஸ் உள்ள நோயாளிகள் மருத்துவர் பரிந்துரைக்கப்பட்ட அளவு திரவத்தையே பருக வேண்டும்.
- சிறு துகள்களாக ஐஸ்கட்டிகளை வைத்து உதட்டினை நனைத்து அதன் மூலமாக தாகத்தினை குறைக்க முடியும்.



5. புரதம்

- புரதம் உடலுக்கு புதிய திசுக்களை உருவாக்குவதோடு வாயு பரிமாற்றம் மற்றும் நோய் எதிர்ப்பு சக்தியினை கொடுக்கிறது.
- புரதம் பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு 7-8 அவுன்ஸ் (1.1-1.4.81 கி / கி.கி)

புரதம் அதிகமாக உள்ள உணவு பொருட்கள்:



முட்டையின்
வெள்ளைக்கரு



கோழியின்
நெஞ்சப்பகுதி



கடல் சார்ந்த
உணவுகள்



தானியங்கள்

6.கால்சியம்

- கால்சியம் எலும்புகளிலும், பற்களிலும் நல்ல வடிவமைப்பை கொடுப்பதோடு மட்டுமல்லாது எலும்பு முறிவினை தடுக்க உதவுகிறது.
- பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு 8.4-10.2 மி.கி / டெசி.லி.

கால்சியம் அதிகமாக உள்ள உணவு பொருட்கள்



பால்



மத்தி மீன்



தயிர்



பாதாம்

7. மாவுசத்து

- மாவுச்சத்தானது நமது உடலுக்கு ஆற்றலையும், மூளை ஆரோக்கியமாக செயல்படவும் உதவுகிறது.
- மாவு சத்தினை பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு = 30-25 மி.கி

குறிப்பு: மேலும் நீரிழிவு நோயாளிகள் இதனை மிக குறைவாகவே எடுத்து கொள்ள வேண்டும்.

மாவு சத்து அதிகம் உள்ள உணவு பொருட்கள்

தானியங்கள்



பழுப்பு அரிசி



ஓட்ஸ்



மாம்பழம்



மரவள்ளி கிழங்கு

8. இரும்பு சத்து

- இரும்பு சத்தானது வாயு பரிமாற்றத்திற்கும், இரத்த சிவப்பணுக்களை உருவாக்கவும் உதவுகிறது.
- இரும்புசத்து பரிந்துரைக்கப்பட்ட அளவு ஒரு நாளைக்கு – 18 மி.கி

இரும்பு சத்து அதிகம் உள்ள உணவு பொருட்கள்



கல்லீரல்

அண்ணாச்சி
பழம்உலர்
பழங்கள்

வேர்க்கடலை

**பத்து விதமான உணவு பொருட்களின் மூலம்
நமது சிறுநீரகத்தை பாதுகாக்கலாம்**

1. பூண்டு

பூண்டின் மூலம் சிறுநீரக செயலிழப்புகளை குறைப்பதன் மூலம் அதன் செயல்பாட்டை மேம்படுத்த உதவுகிறது.



2. குடை மிளகாய்

நமது உடலுக்கு உயிர் எதிர்ப்பு சக்தி கொடுப்பதோடு அல்லாது உடலில் உள்ள திசுக்கள் மற்றும் செல்கள் சேதம் அடையாமல் பாதுகாக்கும்.



3. ஸ்ட்ராபெரி

இவற்றில் வைட்டமின் ஆக்ஸிஜனேற்றம் மற்றும் நார் சத்துகள் அடங்கி உள்ளது. இவற்றின் மூலம் இதயம் பாதுகாக்கப்படுகிறது. மேலும் புற்றுநோய் வராமல் பாதுகாக்கப்படுகிறது.



5. மூங்கில் தண்டு

இவற்றினால் நமது உடலின் சர்க்கரை மற்றும் கொழுப்பு சத்தின் அளவினை சரியான அளவில் பராமரிப்பதோடு இவை சிறுநீரக செயலிழப்பு நோயாளிக்கு முக்கியமாக உதவுகிறது.



5. அத்தி பழம்

இவற்றின் மூலம் நமது உடலில் உள்ள அதிகப்படியான உப்புச்சத்து மற்றும் உயர் இரத்த அழுத்தம் குறைக்கப்படுகின்றது.



6. ஆப்பிள்

இவை சிறுநீரகங்களுக்கு வரும் அனைத்து தீய வினைகளை நீங்குவதோடு சர்க்கரை மற்றும் கொழுப்பு சத்தின் அளவினை சரியாக மேம்படுத்துகிறது.



7. இஞ்சி

இஞ்சியானது சிறுநீரகங்களில் இரத்த ஓட்டத்தினை சரியான முறையில் மேம்படுத்துகிறது.



8. வெங்காயம்

இரத்தத்தில் உள்ள கிரியாட்டின் எனப்படும் உப்புசத்துக்களை சிறுநீரகத்தின் மூலம் வெளியேற்றவும், மேலும் இரத்த அழுத்தத்தினால் ஏற்படும் சிறுநீரக செயலிழப்பை தடுக்கவும் உதவுகிறது.



9. கேரட்

கேரட்டில் - பீட்டா கரோடின் எனப்படும் வைட்டமின் இரத்தத்தில் உள்ள நச்சுப்பொருட்களை வடிகட்டுதலுடன், சிறுநீரக தொற்று நோயிலிருந்து பாதுகாக்கின்றது.



10. ஒமேகா-3-கொழுப்பு அமிலம்

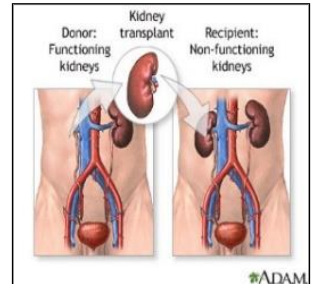
இவற்றின் மூலம் உயர் இரத்த அழுத்தம் குறைக்கப்படுகிறது. மேலும் உடலின் உயர் இரத்த கொழுப்பு சத்து மற்றும் அசாதாரண இருதய துடிப்பிலிருந்து பாதுகாக்கப்படுகிறது.



சிறுநீரக மாற்று அறுவை சிகிச்சை பற்றிய தகவல்

முன்னுரை:

சிறுநீரக மாற்று அறுவை சிகிச்சை என்பது நாள்பட்ட சிறுநீரக செயலிழப்பு உள்ளவர்களுக்காக தேர்ந்தெடுக்கப்பட்ட மற்றொரு மருத்துவ அறுவை சிகிச்சை முறையாகும். ஐக்கிய நாடுகளில் சிறுநீரக மாற்று அறுவை சிகிச்சை மிக பரவலாக நடைபெற்று வருகிறது. இவற்றால் நோயாளியின் உடல் நிலை மேம்படுவதோடு அவர்களின் வாழ்நாள் காலமும் அதிகரிக்கிறது. தற்பொழுது நமது இந்தியாவில் இன்னும் 1,01,000 நபர்கள் சிறுநீரக மாற்று அறுவை சிகிச்சைக்கு காத்திருக்கின்றனர்.



வரையறை

சிறுநீரக மாற்று அறுவை சிகிச்சை என்பது ஒரு ஆரோக்கியமான மனிதனின் உடலில் உள்ள சிறுநீரகத்தை மாற்றி அதன் மூலம் இரத்தத்தில் உள்ள கழிவுகளை வெளியேற்றுவதாகும்.

வகைகள்:

சிறுநீரக மாற்று அறுவைசிகிச்சையானது இருவகைபடும்.

1-உயிறுள்ள கொடையாளி மூலம் சிறுநீரக மாற்று அறுவை சிகிச்சை:

- ❖ இவ்வகையானது, உயிறுள்ள ஆரோக்கியமான ஒரு மனிதனின் உடலில் உள்ள சிறுநீரகத்தை, மாற்று அறுவை சிகிச்சை செய்தல் ஆகும்.

2-இறந்த (உயிரற்ற) கொடையாளி மூலம் சிறுநீரக மாற்று அறுவை சிகிச்சை:

- ❖ இவ்வகையானது இறந்த (அ) உயிரற்ற மனிதனின் உடலில் உள்ள ஆரோக்கியமான சிறுநீரகத்தை சிறுநீரக செயலிழப்பு உள்ள நோயாளிக்கு மாற்றி அமைப்பதாகும்.

முன்கணிப்பு:

சிறுநீரக மாற்று அறுவை சிகிச்சையானது ஒரு மனிதருக்கு தரமான வாழ்வு கொடுப்பதோடு, அவர்களின் வாழ்நாளை 12-20 ஆண்டுகள் நீடிக்க உதவுகிறது.

**இரத்த சுத்திகரிப்பு நோயாளிகள் செய்பவவை மற்றும் செய்யக்கூடாத
செயல்முறைகள்:**

செய்பவை	செய்யக்கூடாதவை
 <p>இரத்த சுத்திகரிப்பினை மருத்துவரின் ஆலோசனையின்படி சரியான காலத்தில் செய்யவேண்டும்.</p>	 <p>இரத்த சுத்திகரிப்பிற்கான வேளையினை தவிர்க்கக்கூடாது.</p>
 <p>புரதம், கால்சியம், இரும்பு சத்து நிறைந்த உணவினை அதிகமாக மேற்கொள்ள வேண்டும்.</p>	 <p>பாஸ்பரஸ் மற்றும் பொட்டாசியம் நிறைந்த உணவினை தவிர்க்க வேண்டும்.</p>
 <p>மருத்துவர் ஆலோசிக்கப்பட்ட குடிநீரை குடிக்க வேண்டும்.</p>	 <p>அதிகமான குடிநீரை குடிக்க கூடாது.</p>
 <p>உடல் எடையினை தினமும் கண்காணிக்க வேண்டும்.</p>	 <p>உடல் எடை அதிகரிக்க கூடாது.</p>
 <p>பரிந்துரைக்கப்பட்ட நேரத்தில், பரிந்துரைக்கப்பட்ட இரத்த பரிசோதனையினை மேற்கொள்ள வேண்டும்.</p>	 <p>இரத்த பரிசோதனை மேற்கொள்ளுவதை தவிர்க்க கூடாது.</p>
  <p>வரையறுக்கப்பட்ட தடுப்பூசி மற்றும் எரித்ரோபாய்மன் ஊசியினை எடுத்துக் கொள்ள வேண்டும்.</p>	 <p>வரையறுக்கப்பட்ட, மருந்துகளைத் தவிர்க்க கூடாது.</p>

முடிவுரை:

இந்நாளில் நாள்பட்ட சிறுநீரக செயலிழப்பால் இரத்த சுத்திகரிப்பு சிகிச்சையானது மிக பரவலாக உள்ளது. இதனால், மேற்கண்ட வீட்டு பராமரிப்பு சிகிச்சை முறைகளை பின்பற்றுவதால் நோயாளிக்கு ஏற்படும் பிரச்சனையை குறைப்பதோடும் மட்டுமல்லாது அவர்களின் வாழ்வு மேம்படவும் உதவுகிறது.



**“சிறுநீரகங்களை பராமரிப்பீர்
வளமான வாழ்வு ிபறுவீர்”.**

APPENDIX II



RASS ACADEMY COLLEGE OF NURSING

Approved By Govt. of TNC & INC - Affiliated with Dr. M.G.R. Medical University

Date:10.07.2017

ETHICAL COMMITTEE

The following members of the ethical committee were present at the meeting held on 10.07.2017 at 2.30 pm in RASS Academy college of Nursing, Poovanthi.

CHAIR PERSON

1. Dr.Muthuselvam,B.Sc, M.B.B.S , MS
Professor of Surgery (Retired)
Chief Surgical Consultant – Health Net Hospital, Madurai.

DEPUTY CHAIRMAN

2. PROF.MRS.H.UMMUL HAPIPA M.Sc (N)
Principal, RASS Academy College of Nursing , Sivagangai -630611

MEMBER SECRETARY

3. PROF. MRS.VIJAYA KAMU M.Sc (N)
Vice Principal, RASS Academy College of Nursing , Sivagangai -630611

MEMBERS

4. PROF.MRS KARTHIHA M.SC (N)
HOD of Community Health Nursing,
RASS Academy College of Nursing, Poovanthi, Sivagangai Dist 630611
5. PROF.MRS. M.VISALAKSHI ,M.SC (N),
HOD of Medical Surgical Nursing,
RASS Academy College of Nursing, Poovanthi, Sivagangai Dist 630611.
6. ASSO.PROF.MRS.K.N.SUDHA ,M.SC (N),
HOD of obstetrical & Gynecological Nursing,
RASS Academy College of Nursing, Poovanthi, Sivagangai Dist 630611.
7. ASSO.PROF.MS.M.NANCY FLOMINA M.SC(N),
HOD of Psychiatric Nursing,
RASS Academy College of Nursing, Poovanthi, Sivagangai Dist 630611.

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It is resolved to accept MRS.S.BHUVANESWARI to conduct an experimental study to assess the effectiveness of self-instructional module on knowledge regarding post dialysis home care among care givers of chronic renal failure patients undergoing haemodialysis at karthik hospital in sivagangai.

The institutional Ethics committee expects to be informed about the progress of the study . Any changes in protocol , patients information and ask to be provided a copy of the final report

Yours sincerely,

Chair Person
Ethics committee

Yours sincerely,


Deputy Chairman
Ethics committee

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Administrative Office

25, Sivagangai Road, Near Anna Bus Stand, Madurai 20. © 0452 4394440, 8903012894, Email: rassacademycon@yahoo.com, Web: www.rassacademy.com

APPENDIX III

Permission letter

From

Mrs.s.Bhuvaneswari,
M.sc (N) II year Student,
RASS academy college of Nursing,
Poovanthi , Sivagangai District.

To

The Managing Director,
Karthick hospital,
Aranmanai vassal ,Sivagangai-61.

Respected sir,

Sub : Permission to collect data among the care givers.

I am mrs. S. Bhuvaneswari doing M.sc (N) in RASS Academy College Of Nursing , Poovanthi ,Sivagangai District affiliated to the Tamil Nadu DR.M.G.R. Medical University , Chennai . As part of my curriculam , I am conducting a research study on the topic :

“ Effectiveness of self instructional module on knowledge regarding post dialysis home care among caregivers of chronic renal failure patients undergoing haemodialysis in selected hospital”.

The purpose of the study is to knowledge the care givers and makes them to understand the home care management of haemodialysis who are chronic renal failure patients in the hospital .I request you to grant permission to undergo data collection in your esteemed hospital .

Thanking you

Yours faithfully ,
Bhuvaneswari

Receving
Dr Mani V. Mani M.S.

[Signature]
PRINCIPAL
RASS ACADEMY COLLEGE
OF NURSING
POOVANTHI - 630 311

APPENDIX IV

LIST OF EXPERTS CONSULTED FOR CONTENT VALIDITY

1. Prof.Mrs .H.UMMUL HAPIPA,M.Sc(N),

Principal,

RASS Academy college of Nursing,

Poovanthi, Sivagangai Dist 630611

2. DR. MANIVANNAN, MD.,

Senior Consultant,

Karthik hospital,

Sivagangai.

3. Mrs.VISALAKSHI, M.SC (N),

HOD of Medical Surgical Nursing,

RASS Academy college of Nursing,

Poovanthi, Sivagangai Dist 630611.

4. Mrs.SUDHA ,M.SC (N),

HOD Of obstetrical & gynaecological,

RASS Academy college of Nursing,

Poovanthi, Sivagangai Dist 630611.

5. MS.NANCY FLOMINA M.SC(N),

HOD of Psychiatric Nursing,

RASS Academy college of Nursing,

Poovanthi, Sivagangai Dist 630611.

6. Mrs .KAVITHA M.SC (N)

Asosociated Professor,
Department of Medical Surgical Nursing,
RASS Academy college of Nursing,
Poovanthi, Sivagangai Dist 630611.

7. Mrs.KARPAGAM M.SC (N)

Associative professor,
Department of Medical Surgical Nursing,
RASS Academy college of Nursing,
Poovanthi, Sivagangai Dist 630611

8. Mrs.KARTHIHA M.SC (N)

HOD of Community Health Nursing,
RASS Academy college of Nursing,
Poovanthi, Sivagangai Dist 630611.

APPENDIX V

PHOTOGRAPHICAL EVIDANCE OF DATA COLLECTION

